Does Dissociation Produce Shame? :
An exploration of adults with sexual abuse histories

A thesis submitted in partial fulfilment of the requirements for the Degree

of

Masters of Arts in Psychology

By

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2018

Acknowledgements

First and foremost, I would like to acknowledge and thank my primary supervisor, Dr Martin Dorahy, for his unwavering commitment to supervision. His guidance, encouragement, depth of knowledge and experience has not only been instrumental in the completion of this research, but is inspiring. I would also like to thank my secondary supervisor, Kumar Yogeeswaren for providing myself and Martin with sound advice regarding the study's design.

To Ken Clearwater and Paul Dempsey of Male Survivors of Sexual Abuse Trust, thank you for your generosity, time and enthusiasm for this study. My thanks also to START for their readiness assist in recruitment.

Most importantly, thank you to all of the participants who so willingly took part in the research. Many men and women have shared personal experiences with me over the past two years, and have expressed hope that studies such as this will continue to contribute to a greater understanding of the prevalence and impact of sexual trauma in our communities.

Finally, to my friends and family.

To my family, Mum, Dad, Chris, Lisa, thank for your undying love and support. The countless phone calls, financial support and just for being there when ever I've needed. To my friends, thank you for forgiving the social occasions I have missed due to study and work commitments, for the reassurance, reality checks, early morning gym sessions, and coffee dates.

I appreciate you all for supporting me in achieving this goal.

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Abstract

Studies suggest a causal interplay between shame and dissociation. Increased shame in response to dissociation has only been indirectly assessed in non-clinical populations. This study employed dissociation induction techniques and aimed to examine if exposure to dissociation increased feelings of state shame. It also sought to clarify the findings of McKeogh et al. (2018), who found shame increased only when dissociation occurred when with a close friend. Two hypotheses were generated. First, that more shame would be reported following a dissociation induction than a relaxation induction, and second that more shame would increase more following dissociation occurring with a close other or acquaintance than when alone. Participants were adult survivors of childhood sexual abuse (n=28), recruited via specific NGO services in Christchurch and Auckland, New Zealand. An induction procedure and a dissociation recall procedure, and two shame outcomes (i.e. state shame scale and single item measure) were employed. The inductions failed to induce state dissociation. However, participants indicated peri-experimental dissociation spontaneously occurring. Median split analyses of this spontaneous peri-experimental dissociation found a significant relationship between higher dissociation and state shame following the induction procedure, but not following the dissociation recall procedure. There was no significant impact of dissociation on single item self-report shame measure. Reasons for shame during the procedures were explored. Analysis suggests that being flawed and exposed were central perceptions related to activation shame. Findings suggest that increased state shame was a result of acute spontaneous dissociative experiences, making more specific the relationship between shame and dissociation. A trend towards more dissociation following the induction procedure compared to the dissociation recall was indicated, suggesting that the intensity of acute dissociation may be a key regulator of shame activation. Future research should seek to replicate these findings in a larger and more diverse population group.

Introduction

There has been a growth in the empirical exploration of dissociation and its relationship to trauma, with particular attention given to the type of traumatic experiences which are more likely to result in dissociative processes. For example, Dutra, Bureau, Holmes, Lybchik and Lyons-Ruth (2009) state that many studies have demonstrated the significant relationship between childhood physical or sexual abuse and dissociation, and Platt and Freyd (2015) have shown that dissociation is more frequently an outcome of trauma which has involved a betrayal from a depended upon person (betrayal trauma theory). These authors found higher levels of trait dissociation in participants who had a history of early, interpersonal trauma perpetrated by someone close**.**

Shame is also an outcome of interpersonal trauma (Amstadter & Vernon, 2008; Platt & Freyd, 2015). However, emotional responses to trauma have been largely ignored in the literature, even though shame has been argued to hold a central role in symptom formation and maintenance in the psychological aftermath of maltreatment (Amstadter & Vernon, 2008; Fergusson, 2005). Currently, a growing number of authors agree that both dissociation and shame co-occur following interpersonal traumatic events and directly impact symptom severity in trauma related disorders like Posttraumatic Stress Disorder (PTSD), complex PTSD, and some of the dissociative disorders (Dorahy et al., 2016; Thomson & Jaque, 2013; Platt & Freyd, 2015; Platt, Luoma, & Freyd, 2016). Moreover, trait level shame has been reported by some to be a significant predictor of dissociation (Irwin, 1998; Platt et al., 2016; Talbot, Talbot, & Tu, 2004); however, the function of the relationship has received little attention (Platt et al., 2016). It might be that dissociation functions as a means of regulating, or bypassing a shame states (Nathanson, 1992; Lewis 1971). Yet dissociative experiences may also potentially increase shame feelings.

Recently, Platt et al. (2016) found an increase in state shame following acute dissociative experiences; which led them to question the regulatory role that dissociation might have in the shame-dissociation link. These authors did not, however, examine the possibility of a causal link, where an increase in state dissociation might directly cause an increase in state shame. Notably, a recent empirical study established a causal link between shame and dissociation. Dorahy et al. (2017) found that following induced state shame, participants experienced an increase in acute (state) dissociative experiences. This leads to a question about the possibility of a bi-directional causal relationship between dissociation and shame, where shame may lead to dissociation and dissociation may lead to shame. McKeogh, Dorahy & Yogeeswsaran (2018) established a link between dissociation and shame but only in the context of dissociation occurring when with a close friend. However, this study only provided an indirect assessment of dissociation and the affects associated with it within a non-clinical sample and via vignettes.

This thesis and the following review intends to further build on the findings of Dorahy et al. (2017) and McKeogh et al. (2018) by continuing to examine the nature of the relationship between dissociation and shame. Specifically, it intends to investigate if an increase of in-the-moment dissociative experiences directly causes an increase in state shame within a population of adults who have histories of childhood sexual abuse. First, in order to provide a rationale for this central question, the ensuing review will explore the central aspects of dissociation, and how it might be related to a number of self-conscious emotions, most importantly shame. It will then explore current literature regarding the relationship between dissociation and shame before addressing the current empirical evidence providing a foundation for the exploration of a causal relationship.

It has also been found that both dissociation and shame have negative consequences in current relationship functioning (e.g., Dorahy, 2010; Dorahy et al., 2016). Thus, in

addition, the current study intends to examine if an increase in state shame following acute dissociation might be impacted by the relationship setting in which dissociative symptoms occur. In a recent path analysis, Dorahy et al. (2016) showed that a direct relationship exists between pathological dissociation and relationship depression and relationship anxiety, and between shame and fear of relationships, relationship depression and relationship anxiety. Thus, this review will also address the impact that shame and dissociation might have on interpersonal functioning.

Finally, relevant methodologies intended to induce dissociation will be reviewed in order to establish the most effective methodology to be utilised. The aim of this it to identify a method that will allow for a direct evaluation of the impact that in-the-moment (state) dissociative experiences might have on state shame, specifically when dissociation occurs when one is alone, with an acquaintance, or with a close other.

Dissociation

Dissociation defined. "During early, intense, and repetitive trauma, there is an adaptive disengagement: a dissociation from any meaningful assessment of fear, or pain, or horror. Because to be fully present for it – and to process its implications – would quite simply overwhelm the brain" (Stein, 2009, p. 324).

Dissociation is a term which has been used to describe a broad range of psychiatric and psychological phenomena (Brown, 2006); however, the nature of dissociation has been subject to debate. Putnam (1997) conceptualised dissociation as a defence mechanism, defining it as a set of experiences and symptoms which have a direct impact on cognitions and behaviours. The defensive functions of dissociation operate by performing three major tasks: the "automatization of behaviour in the face of psychologically overwhelming circumstances, compartmentalisation of painful memories and affects, and estrangement from

the self in the face of potential annihilation" (Putnam, 1997; p. 75). Other definitions of dissociation exist at both the psychological and phenomenological levels (Dell, 2009). Dell (2009) states that a psychological definition of dissociation, like that provided in the Diagnostic and Statistical Manual 5th edition (DSM-5) ("a disruption or and/or discontinuity in the normal integration of consciousness, memory, identity, emotion, perception, body representation, motor control and behaviour", American Psychological Association, 2013; p. 291) provides only a limited, and parochial description. Alternatively, at a subjective-phenomenological level, dissociation, or at least the positive symptoms of it, can be defined as "the recurrent, jarring, involuntary intrusions into executive functioning and sense of self" (Dell, 2009; p.226).

The continuum of dissociation. A popular conception of dissociation is that of a broad set of qualitatively similar experiences differentiated only by quantitative differences in severity (Brown, 2006). Many who subscribe to this view of dissociation argue that dissociative symptoms occur on a spectrum of severity; from the more common dissociative experiences such as absorption, representing the lower end of dissociative severity, to the less common dissociative identities and alterations between them, representing the other extreme (Dalenberg & Paulson, 2009). Continuum or unitary models of dissociation imply that the same underlying mechanism, a breakdown in integrated functioning, underpins all dissociative experiences; and underpin the measurement of dissociation with trait scales such as Carlson and Putnam's (1986) Dissociative Experiences Scale (DES) (Braun, 1988; Van der Hart & Dorahy, 2009). However, there are some who argue that the many phenomena considered to be 'dissociative' by unitary models are more likely to have different psychological origins (Van der Hart & Dorahy, 2009), or underlying mechanisms driving the phenomena.

Normal and pathological dissociation. Dalenberg and Paulson (2009) argue that dissociative phenomena can be categorised according to the normality or pathology of the dissociative processes. The broad operationalisation of dissociative phenomena as 'normal' or 'pathological' can be achieved in several ways; specific to the type of dissociation, the level of dissociation, timing of the dissociative phenomena (peritraumatic or posttraumatic), the relationship of the dissociative phenomena to psychic defence, frequency or base rate of dissociative experiences, and the purpose underlying the dissociation (Dalenberg & Paulson, 2009). In the case of 'normal' dissociative phenomena, dissociation is likely to be only mildly maladaptive or even temporarily adaptive or positive in its effects, considered a more common and temporary response to a trauma, and is minimally related to pathology (Dalenberg & Paulson, 2009). For example, absorption and depersonalisation may be thought of as common strategies employed for the short term regulation of negative affect or physical pain.

On the other hand, 'pathological' dissociation is identified in those who are positive on the dissociative taxon. Eight items on the DES (Waller, Putnam and Carlson, 1996) yield a subscale measuring 'pathological' dissociation (Dissociative Experiences Scale – Taxon, DES-T). The items measure dissociative symptoms such as amnesia, depersonalisation, derealisation, identity diffusion/disturbances and alterations. These experiences are considered negative in their effects, and are highly related to trauma and pathology (Dalenberg & Paulson, 2009). 'Normal' dissociation is represented by non-taxon items, measuring phenomena of absorption and imaginative involvement. Such 'normal' dissociative strategies are assumed to be precursors or vulnerabilities to the rarer forms of dissociation, such as Dissociative Identity Disorder (Dalenberg & Paulson, 2009).

As noted by Holmes et al. (2005), however, the adoption of such a broad, mechanistically-unitary definition of dissociation may create conceptual difficulties and have

implications for achieving clarity of empirical understanding of the fundamental differences between the various phenomena that the term dissociation encompasses. Additionally, a unitary approach is not without clinical implications, assuming a 'one size fits all' method of assessment and treatment (Brown, 2006, Holmes et al., 2005). It is argued that the adoption of a broad definition of dissociation may have led to the exclusion of some important dissociative symptoms from shared awareness among those in the clinical field (Van der Hart & Dorahy, 2009).

Detachment-type and compartmentalisation symptoms. Brown (2006) and Holmes et al. (2005) argue for two distinct types of qualitatively different pathological dissociative symptomology: 'detachment-type' and 'compartmentalisation' dissociative symptoms. Each distinct category is assumed to have different definitions, mechanisms and treatment implications (Holmes et al, 2005) and are considered to operate within their own continuums of distress and disruption to functioning; ranging from milder, non-pathological experiences through to chronic and severely disruptive conditions (Brown 2006; Holmes et al., 2005; Van Der Hart & Nijenhuis, 2011). Holmes et al. (2005) define 'detachment type' symptoms as "altered states of consciousness characterised by a sense of separation (or 'detachment') from certain aspects of every day experience" (p. 5), and includes experiences such as out-of-body experiences (depersonalisation, detachment from the body), emotional numbing (detachment from the emotional experience), or detachment from the world (as in derealisation).

'Compartmentalisation' symptoms are defined by Holmes et al. (2005) as "a deficit in the ability to deliberately control processes or actions that would normally be amenable to such control" (Brown, 2006, p. 14). It is believed that compartmentalisation symptoms cannot be overcome by will (e.g., the person cannot wilfully remember something they described amnesia for); however, they are assumed to be reversible (e.g., the information they

cannot recall has been encoded and they at some stage retrieve it). 'Compartmentalisation' symptoms of dissociation include dissociative amnesia, fugue states, DID, and physical symptoms characteristic of somatoform and conversation disorders (Brown, 2006; Holmes et al., 2005). In each case, the apparently disrupted functions are said to be 'compartmentalized' (producing a deficit in deliberate control over the function) (Holmes et al., 2005); however, can be shown to continue to operate normally (apart from the absence of volitional control) as they continue to influence cognition, emotion and action (Brown, 2006; Holmes et al., 2005).

Structural dissociation. The theory of structural dissociation of the personality (Van der Hart, Nijenhuis, & Steele, 2006) offers a more narrowly defined view of dissociation and provides more clearly defined phenomenological boundaries for understanding dissociative phenomena. Accordingly, a structural view of dissociation considers dissociative phenomena to be limited to those derived from divisions in personality or consciousness (Van der Hart & Dorahy, 2009), which is most akin to Brown and Holmes' compartmentalisation. It is underpinned by the theoretical view of dissociation offered by Pierre Janet, working in the late 19th and early 20th centuries, and conceptualises dissociation as a disturbance of the integrative capacity of the individual at the level of personality, leading to a splitting off and isolation of certain psychological regulating systems that make up integrated personality functioning (Van der Hart & Horst, 1989). Steele, Van der Hart & Nijenhuis (2009b; Van der Hart, Nijenhuis & Steele, 2006) developed the theory of trauma-driven structural dissociation; dissociation consisting of temporary (e.g., as in dissociative hypnotic phenomena) or chronic, trauma-related divisions of the personality structure (Steele, Dorahy, Van der Hart, & Nijenhuis, 2009a; Putnam, 1997). The process of structural dissociation is considered to be driven by trauma, which leads to the division of the personality.

According to the structural view of dissociation, the trauma-driven division of the personality involves a separation of the personality into so-called Emotional Parts (EP) of the personality, parts which remain stuck focusing on the traumatic experience and contain the dissociative action systems of defence, and the Apparently Normal Parts (ANP) of the personality, which focus on functions of daily life and attempt to avoid reminders of the traumatic memory (Steele et al., 2009b). Symptoms of dissociation can manifest in negative dissociative symptoms, when a part of the personality is unable to retrieve mental contents or execute normal functions, because they reside in another (dissociative) part of the personality, and positive dissociative symptoms, when mental contents or functions of one part of the personality intrude into another. Such positive symptoms are often experienced as traumatic intrusions or flashbacks (Steele et al., 2009a). Associated symptoms, for example avoidance, numbing and detachment, may also be auxiliary to positive and negative symptoms. Structural dissociation can then be seen as a defence relating to one's ability to integrate, and by default then compartmentalize behavioural, cognitive and affective information and related mental processes. These defensive processes may be used by the individual under conditions of chronic, inescapable stress as a means of separating, or sectioning-off, memories, skills, affects and other knowledge, by storing them in a less easily accessible way (Barlow & Freyd, 2009; Dutra et al., 2009).

The current study intends to investigate the emotional impact of acute dissociative experiences within a traumatised population, and as such, the manifestations of trauma-driven structural dissociation will provide a particular focus. However, within the context of experimental research, reconstructing a purely structural model of dissociation in a controlled setting is difficult, and thus a full range of phenomena typically captured by the construct of dissociation will be assessed.

The development of dissociation. Structural dissociation of the personality that underpins trauma disorders is thought to be caused by trauma such as childhood physical and sexual abuse; fracturing the integrity of personality functioning (Putnam, 1997; Van der Hart et al., 2006). Research also shows, however, that the development of dissociation can be contributed to by attachment difficulties in childhood, not only functioning as an intrapsychic defence, but also as a means of regulating interpersonal interactions (Lyons-Ruth, 2003, 2008). Bowlby (1988) suggests that the disconfirmation of unbearable childhood experiences by a primary attachment figure can be accompanied by the formation of multiple working models of the self and attachment figures (Richardson, 2010). This intrapsychic process might allow for the infant to deal with the paradox of maintaining the depended upon attachment to an abusive or neglectful caregiver, which evokes the goal-oriented behaviours of the attachment and self-regulatory systems, as well as threat and defence systems. For example, DID may result when the threat to the self includes a high probability of perceived psychic and/or bodily death, in combination with the lack of a holding environment (attachment), leaving the child unprotected and without the means to recapture and reassemble the goodness and permanence of the self, and laying the foundation for the dissociative condition (Draijer & Langeland, 1999; Goodwin, 1985; Goodwin, 2010; Richardson, 2010; Whewell, 2010). Yet, within this psychic experience is also the need to connect and attach. Thus, different identities are organised around defence and attachment needs.

Lyons-Ruth (2003) views attachment as a two-person process of both conflict and defence, within which defensive processes may arise in response to tension or conflict between the needs of the infant and the responses of the primary attachment figure (Lyons-Ruth, 1999). In circumstances of ongoing conflict, the infant forms a defence system within the infant-parent dialogue; between distress or fearful arousal and the responses of the

primary attachment partners. It is at this interpersonal interface that the encoding of the defences into the infants affective-dialogue system occurs, as the child learns through dissociation to both endure abuse at the hands of the caregiver while maintaining their attachment to the abuser critical to survival (Richardson, 2010). Thus, dissociation might also be a means of regulating interpersonal interactions and ongoing traumatic relational environments via depersonalisation, identity confusion and derealisation, providing escape from painful memories and allowing the child to maintain the depended upon attachment (Lyons-Ruth, 2003; 2008; Platt & Freyd, 2015).

Dissociation can therefore be conceptualised as both an intrapsychic means of maintaining the developmental pathway, and an interpersonal defence system within the paradox of maintaining attachment to an abusive or neglectful caregiver. The implications of this are that dissociation driven by chronic trauma, while potentially holding an adaptive role in childhood, interrupts the functioning of the self by disrupting the integration of behavioural, cognitive and/or affective mental processes (Barlow & Freyd, 2009; Dutra et al., 2009), while also having the potential to create long term, maladaptive impacts on interpersonal relatedness (Lyons-Ruth, 2003; 2008).

Affective Correlates of Dissociation

Dissociation and the emotions. The human experience is coloured by a wide range of 'hard-wired' emotions, which affect theorists have differentiated into those which are considered to be basic (e.g. anger, fear, sadness, joy), and those which are considered to be self-conscious (e.g. shame, guilt, pride) (Lewis, 1992; Nathanson, 1992; Tracey and Robins, 2004). The basic or primary emotions are seen to be universal, pre-wired, and observable from early infancy (Lewis 1992); while the self-conscious emotions are distinguished as requiring the sociocognitive processes such as self-awareness and self-evaluation in order to

experience them (Dyer et al., 2016; Lewis 1992). According to Lewis (1992) the basic emotions require only one-self to produce the state. Lewis uses the example of a loud noise causing a state of fear (fright). The fear state is experienced without requiring the awareness of, or reflection on the state by the self in order to experience it. On the other hand, the self-conscious emotions such as shame and guilt require the capacity for self-reflection (Lewis & Michalson, 1983; Lewis, 2003). According to Lewis (1992, 2003), the cognitive capacity for objective self-awareness (the capacity to experience the self as a socially observable object) and the capacity to internalise, and compare one's own behaviour against standards, rules and goals, must be present in order to experience self-conscious emotions. With this capacity in mind, the self-conscious emotions, like shame, embarrassment, guilt and pride (also named by Lewis as *evaluative* self-conscious emotions) take on a regulatory role; they motivate or guide thoughts, feelings, and behaviours (Lewis, 2003; Tracey & Robins, 2004).

Dissociation has been increasingly linked to negative affective states in the literature (Dorahy et al., 2017; Thomson & Jaque, 2013). Dissociation and affect are found to be intimately related constructs (Simeon, Riggio-Rosen, Guralnik, Knutelska, & Nelson, 2008), as dissociation may be one means of avoiding, withdrawing from, or regulating negative affective states such as anger (Feeney, Zoellner, & Foa, 2000), rage (Dorahy & Clearwater, 2012), guilt (Irwin, 1998), and shame (Dyer et al., 2016; Nathanson, 1992). For example, Irwin (1998) found that affective outcomes of childhood trauma served to promote and maintain a dissociative coping style. Specifically, proneness to shame and guilt (trait shame and guilt) were found to mediate the relationship between trauma and dissociation. Other authors have found that both anger (Calamari & Pini, 2003; Feeney et al., 2000) and rage (Salley & Teilinng, 1984) are related to dissociative processes.

Feeny et al. (2000) found a moderate correlation between anger and dissociation among a group of female sexual assault victims and concluded that both dissociation and

anger had become a means for avoiding engagement with trauma-related emotions. Similarly, in a female sexual trauma population, Calamari and Pini (2003) reported a positive correlation between trait dissociation and high scores on measures of both state and trait anger. These authors hypothesised that dissociation may have occurred in the sequelae of anger, as a means of regulating the negative emotion. Furthermore, in a qualitative account of posttraumatic symptomology in a group of War Veterans, Salley and Teiling (1984) described dissociated rage; amnesic periods during which the subject would employ dissociation as a means of avoiding or dissociating "violent, assaultive and destructive" behaviour and its associated emotions out of awareness (p. 98). Thus, dissociation may represent a form of emotional disengagement, an automated strategy for regulating emotions to avoid experiencing anger and rage (Dorahy and Clearwater, 2012).

Guilt, a self-conscious emotion that motivates making amends for a behavioural failure or transgressions (Lewis, 1992; Tangney & Dearing, 2002; Tracey & Robins, 2004), has also been empirically related to dissociation. Both Irwin (1998) and Dorahy and Shumaker (1997) found that proneness to guilt was a significant predictor of dissociative tendencies, indicating that those with both high trait guilt and dissociation may have a dissociative coping style (Dorahy & Shumaker, 1997; Irwin, 1998). More recently, Rugens & Terhune (2013) found that guilt augmented the relationship between trait and state dissociation, suggesting that an individual's tendency for dissociation more greatly determines the experience of state dissociation when experiencing guilt, in comparison to other negative affects (pain, suffering and shame). Furthermore, Dorahy and Clearwater (2012) found elevated scores on measures of both trait and state guilt, as well as significant levels of both overall and pathological (trait) dissociation in a clinical group of male survivors of childhood sexual abuse.

As it stands, there appears to be an agreement that dissociation might function as an automated strategy for regulating negative affective states following trauma. Increasingly, dissociation has also been linked to shame, as clinical interest in shame grows. As this thesis intends to directly assess the relationship between acute dissociation and shame, it is pertinent for the focus of this review to now turn to the definition of shame, before exploring the current evidence supporting the possibility of a causal link between dissociation and shame.

Dissociation and Shame

Shame defined. The word 'shame' is derived from the Indo-European root skam or skem, meaning "to hide" (Kilborne, 1995). Shame drives efforts of hiding or disappearing in order to avoid disgrace (Kilborne, 1995) or the exposure of the self as weak, defective, abnormal, or in some way less than others (Garfinkle, 2012, Nathanson, 1992). The experience of shame is as a wordless response, accompanied by a flooding of painful, intolerable emotions and thoughts about the self as bad (Lewis 1971). It is an unavoidable, biologically hard-wired physiological response to moral digressions, characterised by body gestures and attitudes including a bowed head, closed eyes or gaze diverted to the ground, and the body curved in on itself, making the person as small as possible (Herman 2011; Kaufman, 1996; Lewis, 1971). The discomfort of shame is an acutely self-conscious state, leaving one feeling exposed and with an overwhelming desire to "sink through the floor and disappear" (Herman, 2011; Kaufman 1996; Lewis, 1971; Scheff and Retzinger, 2000; Tangney, 1996).

Shame is a rich human emotion that functions at both the individual and the interpersonal level, and pervades every phase of life (Nathanson, 1992; Tangney & Dearing, 2002). The capacity to experience shame is believed to develop between 14 and 16 months of age within the earliest interpersonal interactions that occur within the family and other key

relationships (Gilbert & Andrews, 1998, Tangney & Dearing, 2002). Gilbert and Andrews (1998) argue that shame first occurs within the mother infant dyad, when the reciprocity of eye gaze and other visuoaffective communication expected by the child is unfulfilled by the mother, triggering the earliest experiences of the visual and nonverbal affect of shame. It is through this interpersonal interplay that shame becomes a central experience in the development of identity and self-functioning (Herman, 2011; Kaufman, 1996).

The powerful emotional forces of shame operate at every level of experience; comprised of negative, global and stable self-evaluations (e.g., "I am a bad person") (Tangney & Dearing, 2002). The negativity of shame interferes with a person's fundamental needs to be positively valued. Shame merges into a sense of one's own identity, leaving behind the belief that the self is flawed, a failure and unloveable (Bose, 2016; Garfinkle, 2012; Gilbert,1998). Garfinkle (2012) states that shame arises when disgrace is coupled with the fear of another viewing how one has dishonoured the self, and exists within the discrepancy between the way one is seen and the way one wishes to appear to the observer. As such, shame is experienced as exposure, vulnerability and fear of what we do not want others to see in ourselves (Kilborne, 1995).

The role of shame. Shame is also a regulator of behaviour in interpersonal contexts (Tangney & Dearing, 2002). It is an agent of socialisation and acts as a moral guide; signalling moral transgressions, regulating peer relationships, social hierarchy, and all the basic forms of social life by alerting the self to changes in social status, and indicating serious damage to social acceptance and dysfunction within social bonds (Gilbert, 1989; 1997; 2003; Gilbert & Andrews, 1998; Herman, 2011; Scheff & Retzinger, 2000). It is a deeply disturbing and disorganising experience which scars the identity with low self-esteem, diminished self-confidence, poor self-concept and self-doubt (Bose, 2016; Herman, 2011; Kaufman, 1996, Lewis, 1971; Scheff & Retzinger, 2000). As such, this master emotion can

influence “who we are in our own eyes” (Tangney & Dearing, 2002, p.2) and is the source of feelings of the whole self as inferior (Bose, 2016; Scheff & Retzinger, 2000).

Shame and alterations in self-perception have been found to be a response to trauma (Amstadter & Vernon, 2008; Dyer, Dorahy, Shannon & Corry, 2013). For example, Platt and Freyd (2012) found that individuals who had experienced at least one psychological trauma were more vulnerable to experiencing a shame response to negative feedback, and endorsed more negative underlying assumptions about the self. Dyer et al. (2013) also found that alterations in self-perception (shame and guilt) mediated the relationship between chronic childhood trauma and posttraumatic aggression and self-harm. Shame has also been noted to be a risk factor for the development of psychopathology (e.g., PTSD) in the aftermath of traumatic events (Budden, 2009) and severity of posttraumatic symptoms (Dorahy et al., 2016). Evidence shows that among individuals with childhood trauma histories, shame experiences also contribute to dissociation, suggesting that shame acts as a moderator in the trauma-dissociation link (Irwin, 1998).

Dissociation and shame. Historically, clinicians have understood shame to be a factor in the aetiology of dissociative symptomology (Ellenberger, 1970); however, in a postmodern world it seems there has been little consideration for shame (Blum, 2008). As Freud was a proponent for the role of guilt in the formation of psychopathology, it was not until 1971 that Helen Block Lewis noted that repressed, denied or avoided shame is likely to lead to symptom formation (Blum, 2008). More recently, there has been an empirical and clinical growth of interest in the role of shame in psychological distress. Reflective of this, increased attention has been given to the link between trauma and shame in the literature, often describing shame as a symptom of posttraumatic stress (Blum, 2008; Budden, 2009; Dyer et al., 2016).

Shame is embedded in the posttraumatic experience, both as a symptom of trauma but also having traumatic characteristics itself. Matos and Pinto-Gouveia (2010) reported that memories of early, shaming experiences have traumatic memory characteristics (e.g., intrusive, arousing, and prompting avoidance), leading to more shame in adulthood when exposed to current shame (Matos & Pinto-Gouveia, 2010). Moreover, according to object-relation theory, children who are abused by an attachment figure internalise a representation of the self as degraded, powerless and bad (Blizard & Bhlum, 1994). Under such circumstances, shame might serve a protective function (Freyd, 1996); where the abused child attributes negative emotional states to their own 'inherent' flaws rather than recognising the harm caused by the other, within the trusted and depended upon relationship (Platt & Freyd, 2012).

Similarly, the development of dissociative symptoms has also been strongly linked to trauma (Dalenberg et al., 2012; Dutra, Callahan, Forman, Mendelsohn, & Herman, 2008). Dissociation can be seen as an intrapsychic defence against the overwhelming emotional response to being abused or neglected by a close other (Barlow & Freyd, 2009; Durta et al., 2009; Putnam, 1997). For example, Blizard & Bluhm (1994) state that victimised children are likely to develop dissociative defences against the overwhelming pain, memories and feelings of powerlessness caused by the abuse in order to preserve the self and maintain attachment with the abuser.

According to Freyd (1994) dissociation is an adaptive response to childhood abuse. Amnesia for the trauma allows the abused child to remain unaware of the threatening traumatic information and protects the attachment with the perpetrator, which is necessary for survival. By regulating, or compartmentalising processes and memories of the trauma and trauma-relevant stimuli through dissociation, the child can preserve the relationship. Literature on the treatment of DID suggests that following repeated victimisation in

childhood, individuals with severe forms of dissociation form a view of the world as dangerous and traumatising, and hold a belief of themselves as shameful and damaged, and therefore responsible for their own abuse (International Society for the Study of Trauma and Dissociation, 2011).

Treatment literature and empirical evidence shows that both trait shame and dissociation are frequently elevated in trauma survivors (Kluft, 2016; Platt & Freyd; 2015, Talbot, Talbot, & Tu, 2004) and have a direct impact on complex PTSD symptom severity (Dorahy et al., 2016). Some authors have hypothesised that trait shame might be a diathesis of dissociation, particularly in the presence of childhood sexual abuse (Talbot, Talbot & Tu, 2004; Thompson & Jaque 2013). In Nathanson's (1992) compass of shame model, dissociation represents an 'avoidance' coping strategy whereby dissociation may be mobilized in an attempt to avoid shame caused by a sense of the self as bad or defective, core beliefs developed during childhood in the environment of a hostile home. According to Nathanson (1992), developing a belief about the self as defective, and as such implicitly shameful, is an adaptive trade-off for the terror of "abandonment or death" (p. 341) at the hands of exploitative and neglectful parents, during a time when the child is totally dependent on the parent for survival. Dissociation then occurs during the shame avoidance process, as the shame produced is so unbearable that the only means of avoidance or escape is through alterations in the sense of self or anaesthesia via depersonalisation (Nathanson, 1992).

Similarly, Lewis (1971) proposes that dissociation acts to bypass shame, and Bose (2016) states that the condemnatory forces of shame brings about dissociation as a means of destroying painful, unacceptable and unendurable self-states. The implication of this is that shame may be the mechanism that accounts for the process of dissociation following severe interpersonal trauma in early childhood (Nathanson, 1992). Indeed, empirical evidence shows that among individuals with such trauma histories, shame experiences contribute to

dissociation, suggesting a moderational role of shame in the trauma-dissociation link (Bose, 2016; Irwin, 1998, Talbot et al., 2004).

Lewis (1992) also proposes a systematic relationship between shame and dissociative processes. He states that the development of DID (referred to as Multiple Personality Disorder by Lewis, 1992) is directly related to early, intense shame experiences, most often caused by chronic sexual abuse. According to Lewis (1992) shame avoidance is the mechanism that accounts for the occurrence of dissociation. Accordingly, in a study comparing shame coping styles among clinical populations experiencing DID, complex trauma, general mental health difficulties and individuals without mental health difficulties, Dyer et al. (2016) found that those with a diagnosis of DID exhibited the highest level of state shame and primarily coped with that shame through a withdrawal coping response. A withdrawal coping response (Nathanson, 1992) to shame and self-annihilating shame caused by experiences of emotional trauma and physical abuse (Nathanson, 1992) was posited to be most closely linked to the use of dissociation as a means of removing oneself from the chronic, inescapable, aversive early environments suffered by many with DID (Dyer et al., 2016). It could be that the dissociative process is developed as a defence against trauma-related affects including shame, a coping strategy for which the victim comes to believe that "it is not me that this is happening to, it is someone else" (Lewis, 1992, p. 11).

The relationship between trait levels of shame leading to increased dissociation raises the question as to whether or not these variables are related at a state level (Dorahy et al., 2016). Recently, Platt and Freyd (2015) found that when exposed to traumatic images depicting interpersonal trauma, participants reported more state shame and more state dissociation, an effect which was amplified in those who endorsed interpersonal trauma histories. Additionally, Platt et al. (2016) hypothesised that following interpersonal trauma, dissociation may act to reduce levels of shame. However, they found that while shame and

dissociation co-occurred in those who had experienced interpersonal trauma, acute dissociation did not function to reduce or bypass shame. What these authors did find was that shame increased following an acute dissociative experience induced via dissociation induction (Platt et al., 2016). However, Platt et al. (2016) did not examine a possible causal link between dissociation and shame, such that dissociation itself might have caused an increase in state shame.

Recently, a number of studies have attempted to address the possibility of a causal link between dissociation and shame. In a set of studies, Dorahy et al. (2017) reported that following a shame induction procedure, both clinical and non-clinical participants had increased acute dissociative experiences. These authors reported a moderate-to-strong relationship between state shame and state dissociation. Moreover, McKeogh et al. (2018) established a relationship between experiences of dissociation and increased shame but only when dissociation occurred within the relationship context of a close other. However, this study was limited by its assessment of a non-clinical population, and non-direct means of assessment (vignettes).

In combination, these findings lead to the central question that the current study intends to address; if increased shame leads to more acute dissociation, is the inverse of the relationship also true? That is, does state shame increase in the presence of in-the-moment (acute) dissociative experiences?

Dissociation, shame and interpersonal functioning. Furthermore, both shame and dissociation have been argued to have a negative impact on interpersonal functioning (Dorahy, 2010; Dorahy et al., 2009; 2013; 2016). Nathanson (1992) argues that those who have been exposed to overwhelming shame within the early developmental period are likely to form expectations about intimate relationships, including expectations about potential

ruptures within relationships later in life. A study conducted by Kim, Talbot and Cicchetti (2009) found that shame mediated the relationship between childhood sexual abuse and intimate partner and family conflict later in life. Moreover, dissociation is also thought to cause characteristic relationship difficulties as patterns of dissociation, which may be adaptive in the face of childhood abuse, become maladaptive within adult relationships (Blizard & Bluhm, 1994; Kluft, 1995).

Dorahy (2010) reported that the lifetime presence of clinically significant shame and current dissociation made significant contributions to interpersonal relationship disconnectedness, and notably, found that dissociation was more predictive of interpersonal disconnectedness than shame. In a later study, avoidance in response to shame, along with dissociation and the presence of complex PTSD were found to significantly predict fear of relationships (Dorahy et al., 2013). As a distinct state of profound disconnection (Putnam, 1997), it might be that dissociation functions as a regulator of shame in interpersonal interactions, by severing interpersonal communication (Lyons-Ruth, 2008). Additionally, dissociation has been found to be significantly associated with relationship preoccupation and fear of relationships (Dorahy et al., 2013). In a recent path analysis, Dorahy et al. (2016) found that not only did both shame and dissociation have direct consequences on the development and severity of complex PTSD symptoms, but they also had a direct impact on relationship functioning. These authors found that shame had a direct impact on relationship anxiety and fear of relationships, and dissociation had a direct effect on both relationship anxiety and relationship depression, an association that was strengthened by the severity of the complex PTSD symptoms.

As the current study intends to employ a dissociation induction technique to address the central hypotheses, it is pertinent to explore existing methods within the literature. This will assist in identifying the most effective and fitting induction procedure to appropriately

examine the possible link between acute dissociation and state shame within various relationship contexts.

Review of Dissociation Induction Methods

A paucity of systematic research in the field of dissociation has been noted by Bremner et al. (1998), due to the absence of reliable and valid measurements of dissociative states. Therefore, most of the current knowledge about dissociative experiences is derived from studies which are retrospective in design (Zoellner, Sacks, & Foa, 2007). While there is debate about the degree to which these inductions induce structural dissociation versus alterations in consciousness, experimental techniques have consisted of dot staring tasks (e.g., Holmes et al., 2006), interpersonal gazing in dyads (Caputo, 2015), mood induction (Zoellner et al., 2007), and via personally relevant dissociation scripts (e.g. Lanius et al., 2002; Laudascher et al., 2010). In order to investigate the correlates of dissociation in a controlled setting in the current study, an effective method of inducing dissociation is needed.

Significant increases in dissociation via an induction procedure which involved exposure to personal trauma-relevant scripts have been reported in participants with diagnoses related to trauma, PTSD and Borderline Personality Disorder (Lanius et al., 2002; Ludascher et al., 2010). Participants in these studies were exposed to personalised scripts relevant to their trauma history and encouraged to remember olfactory, auditory, somatosensory, and visual sensations that were associated with the events for 60 seconds while undergoing functional magnetic resonance imaging (fMRI) (Lanius et al., 2002). Studies which have employed such induction techniques found that participants experienced dissociation which was correlated with increased brain activity in prefrontal and limbic areas (Lanius et al., 2002; Ludascher et al., 2010) and reduced pain sensitivity (Ludascher et al., 2010).

Other studies have shown that exposing participants with a diagnosis of Borderline Personality Disorder to non-trauma, but personal scripts detailing past dissociative experiences successfully induces state dissociation. Winter et al. (2015) reported a significant decrease in neuronal activity in the fusiform gyrus and parietal cortices, and a significant increase in activity in the left inferior frontal gyrus in response to the scripts in participants following induction exposure. Participants also showed reduced cognitive inhibition related to negative emotional stimuli in the emotional Stroop task, related to the change in brain activity; and showed significantly increased scores on the Dissociation-Tension Scale Acute (DSS-4), a brief instrument developed for the assessment of dissociative states during neuropsychological experiments and neuroimaging (Stiglmayr, Schmahl, Bremner, Bohus, Ebner-Priemer, 2009). The use of dissociation induction procedures utilising personalised scripts of trauma or non-trauma but dissociative-relevant experiences show that in dissociation prone individuals (with a trauma history) simply recalling times when experiencing dissociation in the past may be potent enough to induce current dissociative states.

Caputo (2015) employed interpersonal gazing in person-to-person dyads. This was an adaption of earlier dot staring and mirror gazing experiments (Brewin, Ma & Colson, 2013; Caputo, 2013) that were found to produce the perception of strange faces, animals, relatives and monstrous beings instead of the participants own face in the mirror. Additionally, participants reported feelings of being watched from within or beyond the mirror, while maintaining consciousness of looking at themselves in the mirror, an effect, termed by the author as conscious dissociation of self-identity (Caputo, 2010). In the interpersonal gazing condition, participants faced one another in low illumination for 10 minutes, and similar effects were found. However, it is arguable that the effects experienced by the non-clinical participants were truly representative of pathological dissociation (Rodwald et al., 2010).

Rodwald et al. (2010) argue that different mechanisms may underlie dissociation in individuals with major dissociative disorders in comparison to those who do not have a diagnosis.

Finally, Zoellner et al. (2007) investigated a method of dissociation induction based on a mood induction procedure. Participants with a current diagnosis of PTSD were exposed to a procedure based on the Velten Mood Induction (Velten, 1968), in which they were exposed to a set of mood-related, self-referent phrases to induce a dissociative or serene state, proposed by Velten (1968) to significantly induce the relevant mood. In addition to this, Zoellner et al. (2007) augmented the Velten induction with a mood incubation period, found by others to produce more positive effects (Sinclair, Soldat & Ryan, 1997) when used in combination with the mood-related statements (Zoellner, et al., 2007). Following the mood incubation period the authors found that participants experienced more dissociation in comparison to those who underwent a serenity induction (Sinclair et al., 1997). Additionally, greater PTSD severity, depression and trait dissociation were related to greater state dissociation following the induction (Zoellner et al., 2007).

Tasks involving dot staring and interpersonal dyadic gazing tend to induce depersonalisation/derealisation aspects of dissociative symptomology (Caputo, 2015). Additionally, Zoellner et al. (2007) note that these tasks frequently induce fear related symptoms in clinical participants such as panic attacks, or lead participants to engage in intentional distraction to avoid experiencing symptoms. Whereas authors have reported significant dissociation induction via personal trauma scripts, as validated by higher scores on the DSS-4; these tasks also have their pitfalls. It is possible that in a clinical PTSD population, exposure to trauma-related stimuli do not induce dissociation per se, but rather activate trauma- or fear- related schemas for which dissociation may be one of the many potential responses (Zoellner et al., 2007).

As the current study intends to investigate the dissociation-shame link within a trauma population, we have altered the induction procedure by Zoellner et al. (2007) to reflect a structural definition of dissociation (Steele et al., 2009b). Additionally, as in Winter et al. (2015), participants were exposed to non-trauma but dissociation-relevant personal scripts (memories), including those occurring in different relationship settings (close other, acquaintance, alone) to assess the possible causal nature of the association between dissociation and shame. That is, given the evidence that both current shame and pathological dissociation have a negative impact on current relationship functioning, clarification will be sought on the question: will more shame be experienced when dissociation occurs with a close other, an acquaintance or when alone?

The Current Study

The current study intends to further address the dissociation-shame link established by Dorahy et al. (2017), by investigating if the inverse of the relationship is true, that is, is state shame a reaction to acute dissociative experiences in a population of adults with histories of childhood sexual abuse? Additionally, as shame and dissociation are both argued to have a severing impact on interpersonal relationships (Dorahy, 2010; Dorahy et al., 2013; Dorahy et al., 2016), the current research also intends to investigate if the potential causal nature in the dissociation-shame link is augmented in the presence of close others, acquaintances, or when alone. Recently, McKeogh et al. (2018) found in a vignette study of a diverse non-clinical population, that this was in fact the case; but only when dissociation occurred within the relationship context of being with a close other. Thus, the following hypotheses were generated in response to these research questions:

1. As prior research has established a link between trait dissociation and shame, and evidence is beginning to suggest there may be causal links between these constructs,

the current research expands this work and hypothesises that participants will feel more shame following a dissociation induction than following a serenity induction.

2. Moreover, given that it is thought that shame will increase when dissociation occurs within the interpersonal setting than when alone, due to the severing impact dissociation has on interpersonal interactions and the role of shame in signalling dysfunction in social bonds, participants are expected to feel more shame when remembering dissociation when with a meaningful other than with an acquaintance or when alone.

Method

Participants

Participants were 28 adults attending support services for survivors of childhood sexual abuse (n = 27), or who had attended such services (n = 1). Invitation letters (see Appendix A) were disseminated by service management to peer support workers and clinicians.

Characteristics. Of the 28 participants, 7.1% (n = 2) were female and the remaining 92.3% (n= 26) were male. The age of participants ranged from 19 to 65 years, with a mean of 48.7 years. In terms of ethnicity, 78.6% (n = 22) identified as New Zealand European, 7.1% (n = 2) as Māori, 3.6% (n = 1) as Samoan, and 10.7% (n = 3) as 'other', which included Indian, American and Scottish. Eight (28.6%) participants had no high school qualifications, while three (10.7%) had completed National Certificate of Educational Achievement (NCEA) Level 1, two (7.1%) had completed high school, seven (25%) had either a Trade Certificate or Diploma, six (21.4%) had a Bachelor's degree, while two (7.1%) had either a Masters or Doctorate degree. In regards to current relationship status, 53.6% (n = 15) identified as single, 17.9% (n = 5) were in a non-marital relationship, 17.9% (n = 5) were married, and 10.7% (n = 3) were either separated or had divorced. Lastly, 78.6% (n = 22) of participants were attending a male service in Christchurch, 14.3% (n = 4) were attending a male service in Auckland, 3.6% (n =1) were attending a female service in Christchurch and 3.6% (n = 1) was no longer in treatment.

Questionnaire Measures

Demographics. A brief demographic (sex, age, ethnicity, level of educational achievement, history of head trauma and relationship status) measure, and five questionnaires were used. These assessed (a) trait shame, (b) trait dissociation, (c) state shame, (d) state

dissociation, and (e) current relaxation. Additionally, participants were asked to rate the intensity of a number of separate emotions they had experienced during the induction procedure and during the memory recall task (i.e., anger, guilt, shame, pride) on a 5-point Likert scale from 0 (not at all) to 4 (extremely). If participants self-reported feeling ashamed or embarrassed (i.e., "I felt somewhat ashamed during the task"), they were presented with a list of possible reasons for the rise in feelings of shame relating to dissociation (i.e., failure to control oneself, feeling exposed, being flawed, feeling isolated or excluded from internal experiences, feeling isolated or excluded from external experiences, feeling others will feel ill of or reject oneself). Responses were made to each item on a dichotomous (yes/no) scale.

All questionnaires were presented in paper and pencil format and participants were offered assistance in completing the forms if required.

Trait dissociation. The Dissociative Experiences Scale (DES, Carlson & Putnam, 1993).

The DES (Appendix B) is a 28-item self-report measure of the frequency of dissociative experiences, or trait level dissociation, in the daily lives of individuals. It was developed in order to quantify dissociative experiences in both clinical and research populations, and items tap both 'pathological' and 'non-pathological' types of dissociation. Items are rated on an 11 point scale ranging from 0% (never) to 100% (always). Whilst there is some mixed findings regarding the factor structure of the DES, three factors have often been identified; amnesia, depersonalisation/derealisation and absorption (Carlson et al., 1991; Ross, Ellason, & Anderson, 1995; Ross, Joshui, & Currie, 1991; Stockdale, Gridley, Balogn, Holtgraves, 2002). The DES has excellent internal consistency (Cronbach's alpha = .95; Frischholz et al., 1990), and validity (Carlson & Putnam, 1993). In the current study, the Cronbach's alpha coefficient was .94. Taxometric methods developed to distinguish non-

pathological dissociative experiences from pathological dissociative experiences has yielded an eight item subscale, the DES-Taxon (DES-T) (Waller, Putnam, & Carlson, 1996). The DES-T has been found to be a sensitive measure of pathological dissociation. In the present study, the Cronbach's alpha coefficient was .86.

Trait shame. The Experience of Shame Scale. (ESS, Andrews, Qian, & Valentine, 2002).

The ESS (Appendix C) is a 25-item self-report questionnaire which yields three subscales; (1) characterological shame (12 items, e.g., shame about personal habits, manner with others, sort of person you are, personal ability), (2) behavioural shame (9 items, e.g., shame about doing something wrong, saying something stupid, competitive failure) and (3) bodily shame (4 items, e.g., feeling ashamed about all or part of your body). Each subscale addresses the experiential, cognitive and behavioural components of each area of shame assessed. Items are scored from 1 (not at all) to 4 (very much). The ESS shows good psychometric properties, with the total scale showing high internal consistency (Cronbach's alpha = .92) and test-retest reliability for each subscale was reported at r = .78, .74, and .82 respectively, over an 11 week period (Andrews, Qian, & Valentine, 2002). For this study, an additional question was included (item 17, "If you have read this, please leave it blank") as a validity check. In the current, the ESS and all three subscales showed good internal consistency, with Cronbach's alpha coefficients of: .95 (ESS), .92 (ESS Characterological), .94 (ESS Behavioural), and .81(ESS Bodily).

State shame. State Shame and Guilt Scale. (SSGS, Marschall, Sanftner, & Tangney, 1994).

The SSGS (Appendix D) is a self-report measure, consisting of 15 items, comprising three five-item subscales; pride, shame and guilt. The SSGS Shame subscale, the only

subscale used from the SSGS, measures in-the-moment (state) feelings of shame. Each item is measured on a 5 point Likert scale from 1 (not feeling this way at all) to 5 (feeling this way very strongly). Items consist of statements regarding the subjective experience of shame in the present moment (e.g., "I want to sink into the floor and disappear", "I feel small"). The SSGS was developed as a manipulation check for shame induction procedures in experimental research, and is designed to be administered directly following induction. It was used for this purpose in the current study. The SSGS has good internal consistency (inter-item reliability .89) (Tangney & Dearing, 2002) and is reported to have acceptable Cronbach's alpha (.89; Dyer et al., 2016). In the present study, the Cronbach's alpha coefficient was .89 at baseline, .80 following the induction procedure and .89 following the dissociation recall procedure.

State dissociation. Modified Peri-experimental Dissociative Experiences Questionnaire (PDEQ-M, Marmar, Weiss, & Metzler, 1997).

The PDEQ-M (Appendix E) is a self-report measure, consisting of eight items adapted from the original 10-item PDEQ. The PDEQ-M was developed to measure the degree of dissociation that occurs during, or immediately following a traumatic event. The modified version has been used in experimental work and was selected for this study to assess levels of dissociation in participants following a dissociation induction and following exposure to a task designed to cue recall of dissociative memories (peri-experimental dissociation). Items are rated on a 5 point Likert scale, from 1 (not true at all) to 5 (extremely true). In the current research, Item 5 ("I felt as though things that were actually happening to others were happening to me – like I was being trapped when I really wasn't.") was excluded, as it did not capture possible experiences that may have occurred within the induction procedures employed. Three items (1, 3, and 8) assessed forms of 'compartmentalisation'

dissociative symptoms, and the remaining four (2, 4, 6 and 7) measured 'detachment' dissociative symptoms.

The PDEQ-M has been found to have acceptable test-retest reliability (.85), intraclass correlation coefficient, and has been strongly correlated with the original PDEQ (.89; Marshall, Orlando, Jaycox, Foy, & Belzberg, 2002). In the current study the PDEQ-M showed unsatisfactory internal consistency following the induction procedure (Cronbach's alpha = .61) but acceptable internal consistency for the dissociation recall procedure (Cronbach's alpha = .86).

State relaxation. MTracker 8a-Brief (Smith, 2016)

The MTracker 8a-Brief (Appendix F) was designed to measure a state of relaxation following mindful training. Access to the scale and permission for use was granted by Smith via email (personal communication, October 1, 2016). The MTracker 8a-Brief consists of 6 items measuring in-the-moment relaxation. Items are rated on a 4 point scale from 1 (felt this slightly) to 4 (felt this extremely). As the MTracker 8a-Brief is a relatively new measure, psychometric properties were unavailable. For this study, Cronbach's alpha coefficients of .85 (following induction procedure) and .84 (following dissociation recall procedure) were established.

Experimental Manipulations

Induction procedure. The induction procedure was modelled on a dissociation induction developed by Zoellner et al. (2007). First, participants were randomly assigned to one of two induction experiences (i.e., relaxation or dissociation) and then again into one of two relationship contexts (i.e., alone or close other), yielding four experimental conditions (i.e., relaxation alone, relaxation close other, dissociation alone, dissociation close other). Participants were then directed to sit facing a laptop screen and informed that all instructions

would appear on the screen. In addition, the primary investigator read the instructions aloud to ensure they were fully read and understood by the participants. The instructions provided participants with experimental condition-relevant example memories (e.g., "you could think of a time when you found yourself 'coming to' and not being fully aware of what has occurred when you were with someone who you considered to be close.") and then asked to generate two personal, specific memories relevant to their assigned experimental condition (e.g., dissociation when alone). Participants were then asked to share the details of those memories with the primary investigator. Second, participants read 20 induction experience-relevant Velten-like statements, presented at a rate of 1 every 12 seconds via the laptop, and were instructed to concentrate on experiencing the state captured in each statement. Third, mood incubation instructions were presented, before participants were asked to close their eyes and focus on the experience or feeling generated by the induction for 2 minutes. The mood incubation instructions were adapted from Zoellner et al. (2007) to reflect both detachment-type and compartmentalisation symptoms of dissociation (see Brown 2006; Holmes et al., 2005). See Appendix G for induction statements and mood incubation instructions.

A relaxation induction was used as a control condition. It was similar to the dissociation induction, however, participants were given an alternative example memory (e.g., "think of a time when you felt rested and carefree when you were alone.") that reflected being in a calm and relaxed state. The Velton-like statements were the same as those used by Zoellner et al. (2007), developed by Sinclair et al. (1997) as a serenity induction, with the exception that "serenity" was changed to "relaxed" in the mood incubation instructions, similar to the Zoellner et al. (2007) induction. See Appendix G for phrases and mood incubation instructions.

Recalled dissociation procedure. Participants were randomised into one of four experimental conditions; each of which specified an experience (i.e., dissociation or calm and relaxed) and a relationship condition (i.e., alone, acquaintance, close other). Participants were then provided with pen and paper and instructed to generate and write down one memory relevant to their assigned condition (i.e. dissociation when alone). All participants were told that the primary investigator would not be reading their memory script and that it would be destroyed following the conclusion of the meeting (see Appendix H for full instructions provided). This was to reduce the possibility of shame being induced by variables related to the presence of the primary investigator.

Study Procedure

A summary of the procedure is presented in Table 1. Before commencing the study, ethics approval was obtained from the University of Canterbury Human Ethics Committee (Appendix I). Additional support from the Ngāi Tahu Consultation and Engagement Group was gained (Appendix J). Data collection was completed over a 7 month period. Participants were adult males and females involved with Non-governmental Organisation services for adults who were sexually abused in childhood.

Initially, invitation letters (Appendix A) were distributed to individuals attending a support group with other male sexual abuse survivors. Once reply slips were received, participants were contacted to have their queries addressed and a time booked to complete the study. Following this, invitation letters were also distributed to members attending the same support service in Auckland, New Zealand, and to individuals attending a similar service for women in Christchurch, New Zealand.

Upon arrival at the laboratory, participants were provided with written instructions briefly outlining the tasks required for the study (see Appendix K). This was further clarified

with verbal instructions, informing participants of the duration, remuneration, and confidentiality policy. Additionally, participants were further reminded that the tasks may cause them to recall distressing events from their past, and that if they became overwhelmed, they could take a break or withdraw from the experiment at any time. Lastly, any questions were answered by the primary investigator before consent forms were signed (Appendix L).

Before commencement of the first task, participants were given the instructions: "Before we begin I'd like you to fill out some questionnaires and do a small task. One of the questionnaires asks some basic information about you. Two are about past experiences that you have had and one is about how you are feeling right now. There is no right or wrong answers, just answer honestly, and remember, your answers cannot be identified as yours". Participants were offered assistance in reading or completing the questionnaires if they required.

Participants then completed the demographic measure (Appendix M), followed by the DES (Appendix B) and the EES (Appendix C) presented in random order. Participants were then presented with a 'name the faces' type quiz, and asked to name 5 famous faces (e.g., Queen Elizabeth), intended to be a distractor task to wash-out any shame evoked while completing the measures. Lastly participants completed the SSGS (Appendix D) to gain a baseline measure of state shame prior to the induction procedure.

Participants were then randomised into the dissociation or relaxation induction condition, as well as a relationship condition (alone, with a close other). Each individual was provided with verbal instructions before the dissociation induction, or its neutral (relaxation) counterpart were presented. Participants then viewed the instructions on the computer screen, and shared their memories with the primary investigator. They then went on to complete the induction procedure.

Upon completion of this task, participants completed the state questionnaires presented in random order, measuring shame (Appendix D), dissociation (Appendix E) and relaxation (Appendix F), and rated the emotions they had experienced during the task. Those who indicated experiencing shame or embarrassment were asked to indicate if they identified with the possible reasons for experiencing shame (Appendix N) and to describe why they thought they had experienced shame. Following this a short nature video clip was shown, intended to be a distractor task.

For the second phase of the study, participants were provided with blank paper and a pen and given further instruction regarding the task. This involved participants writing detailed accounts of a time that they had dissociative experiences, or the counterpart, feeling calm and relaxed, within a randomly assigned relationship condition (with someone close, with an acquaintance, or when alone). When participants had completed writing their memory script, they completed state shame, dissociation and relaxation measures, as well as single item emotions and were queried further on casual mechanisms for any potential elevation in shame.

Prior to leaving the laboratory, participants were verbally debriefed and provided with a debriefing form (Appendix O), detailing where participants could access further support. Participants received a $10 petrol voucher, and a $15 Westfield Mall voucher as a token of their participation and to reimburse any travel costs to the university.

Table 1

Procedure Summary

Step	Procedure
1.	Participant entered laboratory and is asked to sit at a table with their back to the window to limit distraction.
2.	Participant reads information letter, briefly outlining the tasks required (completion of questionnaires, induction and recall procedures). Participant prompted to ask questions prior to reading and signing consent.
3.	Demographic information, trait dissociation and shame questionnaires completed followed by name the faces distractor task.
4.	Baseline state shame questionnaire completed.
5.	Induction procedure commences. Participant is asked to sit facing the laptop on the table in front of them. Instructions are presented on the laptop screen while read aloud by the primary investigator. Participant then generates and talks about two condition-relevant memories and is given further instruction regarding the induction. Participant views 20 experience relevant statements on laptop screen, the mood incubation instructions (also read aloud by primary investigator) and is instructed to sit with their eyes closed for two minutes and attempt to generate and experience a dissociative or relaxed state.
6.	State shame, peri-experimental dissociation, relaxation and single item emotion scales completed. Additionally, participants who indicated shame were asked to affirm reasons for it.
7.	Participant asked to watch a nature video.
8.	Participant provided with blank paper and a pen, and given instructions to recall and write down a memory within the randomised experience (dissociation or calm and relaxed) and relationship context (close other, acquaintance, alone).
9.	State shame, peri-experimental dissociation, relaxation and single item emotion scales completed. Additionally, participants who indicated shame were asked to affirm reasons for it.
10.	Participant debriefed and thanked for their participation, questions answered, and provided with shopping and petrol vouchers to the value of $25

Data Analysis

All data gathered was coded and entered into the statistical programme Statistical Package for Social Sciences (IBM SPSS Statistics 25). Following reliability and descriptive analyses, exploratory analyses were conducted. Outliers were adjusted according to the Winsorizing method. Pillai's Trace was used as the significance test in multivariate analysis of variance (ANOVA) calculations and the Bonferroni procedure was employed where post-hoc tests were utilised. Lastly, statistical significance was set at the $p = < 0.05$ level.

Process for examining induction procedure. To assess the capacity of the induction procedure to induce a state of dissociation or relaxation, a two-way between-subjects ANOVA was utilised to examine self-reported trait shame and peri-experimental dissociation across induction states (i.e. relaxation and dissociation), and relationship context (i.e. when alone or when with a close other). As no impact of the manipulation on peri-experimental dissociation was found following the induction manipulation, it was not considered germane to continue further statistical analysis of the dependent variables of induction experience and relationship context as planned. Moreover, it was not believed that further investigation of the impact of the relationship context on shame in the face of acute dissociative experiences was viable and so exploration of hypothesis two was not pursued. Therefore, peri-experimental dissociation was utilised as an independent variable, in order to allow further analysis of the data to address the question central to the present study – if shame is directly related to experiences of in-the-moment dissociation.

A median-split was utilised on the PDEQ-M scores (*Mdn*=16), resulting in the establishment of a new independent variable, peri-experimental dissociation, across two levels: 'low' and 'high'. Exploratory data analysis detected three outliers. The values were changed to the third standard deviation according to the Winsorizing method. One-way

ANOVA tests were utilised in order to assess if any differences existed across age and total trait shame, and multivariate analysis of variance (MANOVA) tests were run to check for differences in trait shame (subscales), and trait dissociation.

Next, one-way ANOVA tests were utilised to compare state shame between 'low' and 'high' dissociation groups on the state shame measure (SSGS) and self-report shame (single item 'shame'). Finally, frequencies of 'shame explanations' were assessed.

Process for examining recalled dissociation procedure. A one-way ANOVA was employed as a manipulation check of the dissociation recall procedure. The analyses revealed no differences for peri-experimental dissociation after recalling experiences of dissociation or relaxation within the three specified relationship contexts across the four conditions. Thus, peri-experimental dissociation was utilised once again as an independent variable, to address if shame was directly related to levels of peri-experimental dissociation following recalling a memory of dissociation or relaxation. Additionally, further consideration of the impact of the relationship context within which the experience occurred was not considered practical, so exploration of hypothesis two was not pursued.

A median split calculation (*Mdn*=13) on the PDEQ-M scores after the recalled dissociation procedure was calculated, yielding two levels of peri-experimental dissociation: 'low' and 'high'. Exploratory data analysis was conducted and no outliers were identified. One-way ANOVA tests were utilised in order to assess if any differences existed across age and total trait shame, and multivariate analysis of variance (MANOVA) tests were run to check for distribution of trait shame (subscales) and trait dissociation. Next, one-way ANOVA tests were utilised to compare state shame between 'low' and 'high' dissociation groups on the state shame measure (SSGS) and self-report single item shame. Finally, frequencies of 'shame explanations' were assessed.

Results

Induction Procedure

Manipulation check. To determine the capacity of the induction procedure to induce dissociation, a two-way (Experience by Relationship Context) between subjects ANOVA was conducted for peri-experimental dissociation across induction experience (relaxation, dissociation) and relationship context (alone, close other). No main effects for peri-experimental dissociation were found across induction experience, $F(1,24) = .14$, $p = .94$, $\eta_p^2 = .00$, or context, $F(1,24) = 11.57$, $p = .45$, $\eta_p^2 = .10$, indicating that there was no increase in peri-experimental dissociation in the dissociation condition or when exposed to the relationship context (e.g., alone or close other). No significant interaction was found for induction experience by relationship context, $F(1,24) = 2.29$, $p = .77$, $\eta_p^2 = .00$, indicating no differential impact of the manipulation on levels of peri-experimental dissociation. Descriptive statistics for this analysis can be found in Table 2.

Table 2

Descriptive statistics of the degree participants experienced peri-experimental dissociation across experience and context after the dissociation induction

	Context	Mean	Standard Deviation
Relaxation	Alone	15.86	4.74
	Close Other	16.57	4.12
	Total (*n*=14)	16.21	4.28
Dissociation	Alone	15.14	6.82
	Close Other	17.00	4.04
	Total (*n*=14)	16.07	5.65
Total	Alone	15.50	5.65
	Close Other	16.79	3.93
	Total (*n*=28)	16.14	4.82

Note - Scale scored on a 5 point Likert scale from 1(Not at all true) to 5 (Very much true)

Similarly, a two-way between subjects ANOVA was also conducted to determine the capacity of the relaxation induction to induce a state of relaxation across induction experience and relationship context. A significant main effect was found for induction experience, $F(1,24) = 12.52$, $p = < 0.05$, $\eta_p^2 = .34$, indicating the relaxation induction evoked significantly more relaxation than the dissociation induction. No main effect was identified for relationship context, $F(1,24) = .55$, $p = .47$, $\eta_p^2 = .02$, showing no significant difference in relaxation when alone or with a close other. Finally, no interaction was identified for relaxation across induction experience by relationship context, $F(1,24) = 12.52$, $p = < 0.05$, $\eta_p^2 = .34$, indicating that experience and relationship context did not interact to produce different relaxation scores. The descriptive statistics for this analysis are presented in Table 3.

Table 3

Descriptive statistics of the degree participants experienced relaxation across experience and context following the relaxation induction

	Context	**Mean**	**Standard Deviation**
Relaxation	Alone	2.50	0.10
	Close Other	2.90	0.77
	Total (*n*=14)	2.70	0.88
Dissociation	Alone	1.74	0.37
	Close Other	1.74	0.60
	Total (*n*=14)	1.74	0.48
Total	Alone	2.12	0.82
	Close Other	2.32	0.90
	Total (*n*=28)	2.22	0.85

Note: Scale scored on a four point Likert scale from 1(Slightly) to 4 (Extremely)

Establishment of a new independent variable - peri-experimental dissociation. In order to address the central question of the current study, a median split on peri-experimental dissociation scores during the induction task was calculated (*Mdn* = 16). This established a new independent variable of peri-experimental dissociation with two groups: “high” peri-

experimental dissociation, and "low" peri-experimental dissociation, as measured by the PDEQ-M. Next, the single emotion items "shame" and "embarrassment" were collapsed to create one single item variable "shame", as the lay-person might find distinguishing the two difficult, and they are closely aligned emotions thought to be different manifestations of the same underlying affect (i.e., shame; Nathanson, 1992; Tomkins, 1963). Following this, exploratory data analysis was completed.

Characteristics. Demographic and trait measure statistics are presented in Table 4. A one-way ANOVA showed no difference in age across low and high dissociation, $F(1,26) = .263$, $p = .61$, $\eta_p^2 = .01$. In terms of sex, both female and male participants were evenly distributed across the levels. The majority of participants identified as New Zealand European (78.6%), and were relatively evenly distributed across both levels of dissociation. In regards to other ethnicities, individuals identifying as Samoan, Indian or 'other' (American, Scottish) were skewed towards low dissociation (14.29%), with the exception of 2 participants who identified as Māori, who both indicated high levels of dissociation (7.1%).

In terms of educational attainment, just over a quarter of participants (28.6%) had no high school qualifications and tended towards low dissociation, whereas participants with high school qualifications tended towards high dissociation. Of those who had a tertiary qualification, participants with a Trade Certificate or Diploma were relatively evenly distributed (low, 10.7%; high, 14.3%), whereas those with higher qualifications (i.e., Bachelors or above) tended more towards low levels of dissociation. Individuals who indicated having an historic head injury (17.9%) (e.g., had lost consciousness for a period of 30 minutes) were relatively evenly distributed. Just over half of participants indicated their current relationship status as "single" (53.6%), and were evenly distributed across high (25%) and low (28.6%) dissociation. Just over one third of participants were in relationships (i.e., "in a non-marital relationship" or "married'), and were distributed in opposite directions (i.e.

in a non-marital relationship towards low, married towards high). Finally, participants who indicated their relationship status as "separated" or "divorced" were skewed towards high levels of peri-experimental dissociation.

A One-way ANOVA was conducted to determine if a significant difference existed across total trait shame (ESS total) for the two levels of peri-experimental dissociation (e.g., low and high). No significant difference was found on total trait shame scores across the two levels, $F(1,26) = 0.12$, $p = .75$, $\eta_p^2 = .00$. One-way multivariate analysis of variance (MANOVA) tests were conducted to determine if significant differences existed across trait shame subscales (i.e. characterological, behavioural, bodily) and trait dissociation scales (i.e., DES, DES-Taxon) for the two levels of peri-experimental dissociation. No multivariate main effects across high and low peri-experimental dissociation were found on trait shame subscale or trait dissociation scales, $F(3,24) = 0.19$, $p = .90$, $\eta_p^2 = .02$, $F(2,25) = 0.83$, $p = .45$, $\eta_p^2 = .06$, respectively. Thus, there were no trait shame or trait dissociation differences in participants across the two levels of acute dissociation.

Table 4

Descriptive Statistics for Age and Trait Measures across high and low peri-experimental dissociation following the induction procedure

	Dissociation	
Characteristic	Low (*n*=14)	High (*n*=14)
Age: *M(SD)*	49.86(9.60)	47.57(13.64)
Sex: *n*		
Female	1	1
Male	13	13
Ethnicity: *n*		
New Zealand European	10	12
Māori	0	2
Samoan	1	0
Indian	1	0
Other	2	0
Education: *n*		
No Qualification	5	3
NCEA Level 1	0	3
NCEA Level 3	0	2
Trade Certificate/ Diploma	3	4
Bachelor's Degree	5	1
Master's Degree	0	1
Ph.D	1	0
Relationship Status: *n*		
Single	8	7
Non-marital relationship	4	1
Married	1	4
Separated/ Divorced	1	2
Head Trauma: *n*		
Yes	2	3
No	12	11
ESS: *M(SD)*		
Total	67.21(20.92)	69.57(16.96)
Characterological	32.78(11.10)	33.86(8.24)
Behavioural	23.93(8.70)	24.14(6.54)
Bodily	10.50(3.84)	11.57(3.86)
DES: *M(SD)*		
Total	24.74(19.52)	33.52(16.42)
Taxon	19.46(19.93)	27.86(20.74)

Test of the central question – Does shame increase following exposure to state dissociation? To test the question central to the present study, one-way ANOVA tests were run to determine if shame differed between those with low and high levels of peri-experimental dissociation. A significant difference was found for shame, $F(1,26) = 4.34$, $p = 0.04$, $\eta_p^2 = .14$, indicating that there was more shame associated with high peri-experimental dissociation than with low peri-experimental dissociation following the induction procedure. A one-way ANOVA was also conducted on the self-report single item for shame across both levels of peri-experimental dissociation. No significant difference was found for self-reported shame, $F(1,26) = 0.51$, $p = .48$, $\eta_p^2 = .02$. Therefore, individuals who experienced high levels of peri-experimental dissociation following the induction procedure indicated more shame on a measure of state shame (SSGS), but not on self-reported single item for shame.

Single item explanations for shame. The frequencies for single items addressing the potential reasons for shame occurring during the induction procedure were assessed. Over half of the participants (n=19, 69.86%) indicated experiencing at least "a little" shame during the induction manipulation. Of those who experienced shame, the predominant explanations were experiencing a sense of "feeling flawed" (74%), or "feeling exposed" (63%); rather than "feeling like a failure" (36%), "feeling a sense of losing control over oneself" (16%), "feeling isolated from internal experiences" (32%), "feeling isolated from external experiences" (37%), or "feeling that others would feel ill of, or reject oneself if they knew what internal experiences were occurring" (5%). Lastly, further frequency calculations identified that that participants who indicated feeling flawed (n = 14) after the induction experience most often also indicated feeling exposed (n = 9).

Recalled Dissociation Procedure

Manipulation check. A one-way ANOVA was conducted to assess the capacity of recalling a memory of experience (e.g., dissociation or relaxation) within a relationship context (e.g., close other, acquaintance, alone) to induce peri-experimental dissociation. No statistically significant difference in peri-experimental dissociation was found between the experimental groups (i.e., dissociation when with a close other, dissociation when with an acquaintance, dissociation when alone, calm and relaxed when with a close other, acquaintance, or alone), $F(2,24) = .10$, $p = .41$, $\eta_p^2 = .11$, following the task. Thus, the impact of recalling a memory of experiencing dissociation or feeling relaxed within a relationship context did not differentially impact on peri-experimental dissociation. Descriptive statistics for this analysis are displayed in Table 5.

Table 5

Descriptive statistics of the degree participants experienced peri-experimental dissociation when recalling memories of experiencing dissociation or relaxation within a relationship context.

Memory Condition	*n*	Mean	Standard Deviation
Dissociation – close other	6	18.5	8.10
Dissociation – acquaintance	7	14.23	5.65
Dissociation – alone	7	13.14	7.69
Relaxed	8	13	6.51

Note - Scale scored on a 5 point Likert scale from 1(Not at all true) to 5 (Very much true)

Establishment of a new independent variable - peri-experimental dissociation. Given the lack of distinguishably different levels of peri-experimental dissociation across groups, a median split on the PDEQ-M scores following the task was calculated (*Mdn* = 13), yielding two levels of peri-experimental dissociation: low (*n* = 12), and high (*n* = 16). Again,

the single emotion items of shame and embarrassment were collapsed to create one single item of self-reported shame before exploratory data analysis was conducted.

Characteristics. Demographic and trait measure statistics are presented in Table 6. One-way ANOVA was conducted to determine if any significant differences existed across age for the two levels of peri-experimental dissociation (e.g., low and high) and descriptive statistics for demographics (sex, ethnicity, highest level of educational attainment, historic head trauma and relationship status) were generated. No significant difference was found for age across low and high levels of peri-experimental dissociation, $F(1,26) = 0.5$, $p = .83$, $\eta_p^2 = .00$. In terms of sex, males were relatively evenly distributed across the levels, however both females scored within the high range. Participants who identified as New Zealand European were skewed towards the high level. In regards to the other ethnic groups, participants tended towards low levels of peri-experimental dissociation, while Māori individuals identified as high. Those with no educational qualification were evenly distributed, as were those with NCEA Level 3. Participants with a qualification in a trade or who had a diploma tended towards high levels of peri-experimental dissociation, as did those who held a Master's degree. Conversely the remaining participants with a tertiary education (i.e., Bachelor's degree, Ph.D) were skewed towards low levels of dissociation. In regards to having an historic head injury, those who indicated yes, and those who indicated no were relatively evenly distributed. Finally, over half of those whose current relationship status was single indicated dissociation at the high level. Similarly, those who were married, separated, or divorced tended more towards high peri-experimental dissociation, while those who were in a non-marital relationship tended towards low levels of dissociation following the task.

One-way ANOVA showed no statistically significant difference on trait shame (ESS total) between peri-experimental levels of dissociation, $F(1,26) = .83$, $p = .37$, $\eta_p^2 = .03$. Similarly, one-way MANOVA tests of ESS trait shame subscales (i.e., characterological,

behavioural, bodily) and measures of trait dissociation (DES, DES-T) found no significant multivariate effects, $F(3,24) = .63$, $p = .07$, $\eta_p^2 = 1.74$, $F(2,25) = .2.57$, $p = .10$, $\eta_p^2 = .17$, respectively. Therefore, there was no significant difference found in trait shame or trait dissociation across the two levels (low and high) of peri-experimental dissociation.

Table 6

Descriptive Statistics for Age and Trait Measures across high and low peri-experimental dissociation following the dissociation recall procedure.

	Dissociation	
Characteristic	Low (*n*=12)	High (*n*=16)
Age: *M(SD)*	48.17(13.11)	49.13(10.81)
Sex: *n*		
Female	0	2
Male	12	14
Ethnicity: *n*		
New Zealand European	8	14
Māori	0	2
Samoan	1	0
Indian	1	0
Other	2	0
Education: *n*		
No Qualification	4	4
NCEA Level 1	0	3
NCEA Level 3	1	1
Trade Certificate/ Diploma	2	5
Bachelor's Degree	4	2
Master's Degree	0	1
Ph.D	1	0
Relationship Status: *n*		
Single	6	9
Non-marital relationship	4	1
Married	1	4
Separated/ Divorced	1	2
Head Trauma: *n*		
Yes	2	3
No	10	13
ESS: *M(SD)*		
Total	64.67(19.91)	71.19(17.92)
Characterological	31.75(10.81)	34.50(8.77)
Behavioural	23.00(7.97)	24.81(7.40)
Bodily	9.92(3.82)	11.88(3.70)
DES: *M(SD)*		
Total	21.49(18.90)	34.67(16.00)
Taxon	17.29(21.00)	28.43(20.41)

Test of the central question – Does shame increase following exposure to state dissociation? To test the question central to the present study, one-way ANOVA tests were run to determine if shame differed between those with low and high levels of peri-experimental dissociation. No significant differences were found for state shame $F(1,26) = 1.07$, $p = .31$, $\eta_p^2 = .04$, or self-reported shame, $F(1,26) = .17$, $p = .68$, $\eta_p^2 = .01$. Therefore, shame did not differ among individuals who experienced peri-experimental dissociation at low or high levels during the dissociation recall procedure.

Single item explanations for shame. Frequencies of the single items exploring the potential reasons for shame in those who did indicate experiencing shame during the task were calculated. The findings were similar to that of the induction procedure. Of those who indicted shame via the self-report single item 'shame' measure (n=18, 64.29%), the most predominant explanations were a sense of 'feeling exposed' (50%), or 'feeling flawed in some way' (42.86%), rather than the alternative explanations provided: failure to control oneself (50%), loss of control over oneself (27.8%), feeling isolated from internal experiences (27.8%), feeling isolation from external experiences (55.6%), feeling that others would feel ill or, or reject oneself if they were aware of internal experiences occurring (33.3%). Of those who indicated the most prominent explanation of feeling exposed during the dissociation recall procedure (n = 14), most also identified a sense of feeling flawed (n = 11) as an explanation for shame experienced during the dissociation recall procedure.

Comparison of Peri-experimental Dissociation following the Induction and Recalled Dissociation Procedures.

As a statistically significant relationship between higher dissociation and increased shame was found following the induction procedure, but not following the dissociation recall procedure, a comparison of peri-experimental dissociation between tasks was conducted. A

paired-sample *t*-test revealed a non-significant trend, $t(27) = 1.81$, $p = 0.8$, towards higher peri-experimental dissociation following the induction procedure compared to the recalled dissociation procedure. Thus, a trend towards more peri-experimental dissociation during the induction procedure was evident compared to the recalled dissociation procedure.

Discussion

The present study sought to directly examine experiences of dissociation to ascertain whether they heighten feelings of acute shame; and if so, did the closeness of the interpersonal relationship in which the dissociation occurred influence the amount of shame experienced. This study built on previous work that indirectly assessed dissociation and found that when dissociation occurred with a close friend feelings of shame increased (McKeogh et al., 2018). The experimental manipulations of dissociation failed to increased dissociation, which was inconsistent with other studies using the methodology (Platt et al., 2016; Winter et al., 2015; Zoellner et al., 2007). Consequently, hypotheses one (that state shame would increase more following a dissociation induction then a relaxation induction), and two (participants would report more shame when remembering memories of dissociation occurring when with a close other or acquaintance than those who were exposed to memories of dissociation occurring when alone), were unable to be addressed. However, when utilising spontaneous peri-experimental dissociation, support for the question central to the thesis was established.

Results indicate that when dissociation was occurring in the present, it was associated with significant increases in feelings of shame. However this relationship was only true when shame was measured by a state shame measure, and not when shame was reported on a self-report single item measure. It was also found that recalling memories of past dissociation was not related to an increase in current feelings of shame on either the state shame scale or self-report single item measure. A non-significant trend indicated higher levels of dissociation following the induction procedure compared to the dissociation recall procedure (i.e., memories of past dissociation). Therefore, state dissociation appears somewhat more elevated when experienced in the present than when remembered from the past, and this may impact on shame experiences. In short, it seems that when dissociation

occurs in the present it is directly related to an increase in current feelings of shame (assessed by the state shame measure), but thinking about dissociation which has occurred in the past has no influence on state shame. A tentative hypothesis could be that as dissociation increases, so does feelings of in-the-moment (state) shame. These findings are explored further in relation to the existing literature in the ensuing discussion before methodological and future research considerations are presented.

Overall Findings

Manipulation checks, adjustment of statistical analyses, and experimental condition characteristics. Analysis revealed no significant impact of the manipulations employed in the present study. There was no impact of the induction condition (i.e., dissociation) or the relationship context (alone or with a close other) on measures of peri-experimental dissociation after the induction procedure, or following a task involving recalled memories of dissociation across relationship contexts. Therefore, participants were not able to be differentiated on state dissociation according to the experience or context specified within the induction or dissociation recall procedures.

However, median split calculations yielded two levels of peri-experimental dissociation (low and high). Analysis of age, trait shame and trait dissociation revealed no significant differences across two levels of peri-experimental dissociation following the induction or dissociation recall procedures, suggesting that any effects seen in the present study were due to the experiences which occurred during exposure to the study, rather than individual factors.

Dissociation induction procedure – Acute dissociation and state shame. Results from the current study indicated that state shame (measured by the SSGS) significantly increased in response to acute dissociative experiences when compared to lower levels of

acute dissociation. Moreover, analyses of this relationship indicated a large effect size, despite the limited number of participants. Where others (i.e., McKeogh et al., 2018) have also found evidence of this relationship via a less direct means of assessment, and in a non-clinical population, findings have been specific to dissociation occurring within the context of an intimate interpersonal setting, such as dissociation occurring when with a close friend. The finding of the current research corroborates and strengthens recent literature, which suggests a causal interplay between dissociation and shame where exposure to shame causes reactive dissociative experiences, and in-the-moment dissociation causes a rise in feelings of shame (e.g., Dorahy et al., 2017; McKeogh et al., 2018).

The dissociation induction procedure did not differentiate between those who were exposed to either dissociation or relaxation conditions, or the relationship context in which the induction was grounded. Zoellner et al. (2007) reported increases in state dissociation induced via a similar induction procedure, and suggested the procedure evoked a mild dissociative state adequate for controlled assessment of state dissociation without causing elevated distress in clinical samples. The current study was not able to replicate the induction, suggesting it may not be robust, or at least not in participants with childhood abuse histories.

Subjective reports of dissociation did differ across participants, however, in the induction procedure, and this spontaneous peri-experimental dissociation may be more reflective of the state dissociation that occurs in response to real-world situations, as it is not manipulated or laboratory controlled. Thus, state shame elevations are likely to have been representative of the participants' subjective experience of dissociation. Additionally, this could in part address the discrepancy found between measures of shame. That is, if the spontaneous dissociation that occurred during the study mimic's real-world dissociation, participants would have been more likely to report shame from their subjective experience

(i.e., captured by the SSGS) than from an objective point of view (i.e. "I felt ashamed during the induction.").

In addition, self-reporting of affect is reliant on an individual's ability to identify and accurately label internal experiences in-the-moment. Childhood sexual trauma populations frequently experience high shame-proneness (Dorahy & Clearwater, 2012; Talbot et al., 2004), as well as difficulties identifying and describing internal states (emotional dysregulation) (Cook et al., 2005). As such, measures of state shame, which provide a less direct means of measuring shame and capture more the subjective experience of shame, are likely to mitigate such factors and allow for a more accurate measurement of shame which is occurring in the moment (Turner, 2014). Moreover, factors related to self-awareness or social-desirability and the nature of shame itself, driving a desire to withdraw or hide, can inhibit reporting of shame states (Lewis, 1971; Nathanson, 1992; Turner, 2014). Thus, items which consist of statements regarding the subjective experience of shame in the present moment (e.g., "I want to sink through the door and disappear", "I feel small"; Marschall et al., 1994) may be more readily identified by participants who are in a shame state, and therefore be more effective in accurately measuring in-the-moment shame than single item self-report measures which require an objective assessment of one's own internal state.

That increased state shame occurs in the presence of spontaneous dissociation raises a question regarding the shame inducing elements of dissociation. Platt et al. (2016) found that following a dissociation induction in a traumatised sample, dissociation did not serve to sever shame (i.e., bypassed shame theory, Lewis, 1971) but, contrary to expectations, shame increased. These authors suggested that while dissociation might function to by-pass initial trait level shame, shame might again be generated in the face of dissociation due to appraisals regarding the experience of dissociation as shameful, or that the induction had cued trauma re-experiencing. However, no literature to date has addressed these hypotheses. Thus, the

current study drew on participants' subjective experiences of shame during the induction procedure to explore shame inducing elements of dissociation.

Self-reported reasons for shame. Although shame measured by a self-report single item measure did not significantly increase in the presence of spontaneous dissociation, a number of participants did report experiencing shame during the task. For those who did report shame, the most predominant explanation seemed to be about feeling flawed. Additionally, of those who reported that shame had caused them to feel flawed, the majority also indicated feeling exposed.

Shame is often described as a self-focused and self-evaluative experience of being inadequate and an unattractive social agent, and therefore becoming a flawed self (Gilbert, 1997, 1998; Tracey & Robins, 2004). A sense of being exposed during the induction task could imply that shame was related to the interpersonal context in which the perceived exposure occurred, which would likely include exposure in the presence of the researcher. Therefore, self-reports of participants feelings flawed and exposed might not be surprising, taking into consideration the high levels of trait-shame within sexual abuse populations (Dorahy & Clearwater, 2012; Talbot et al., 2004). However, it is not clear what aspects of being a part of the induction experience drove feelings of shame about being flawed. In combination with experiences of feeling exposed, as though participants' perceived flaws were exposed in some way during the induction procedure, a tentative conclusion could be made that the shame generated was related to a risk of social exclusion or rejection (Gilbert, 1998, 2002), or a sense of feeling flawed for dissociating, which was exposed in the presence of the researcher. McKeogh et al. (2018) hypothesised that dissociation when with a close friend provided a greater risk of social exclusion, resulting in felt shame.

Of note, feelings of exposure may have inhibited self-reporting shame. Measures of state shame provide a more indirect measure of the subjective experience of in-the-moment shame. The use of more "opaque" measures with lower face validity have been found to improve the measurement of shame while it is occurring in-the-moment (Turner, 2014). Taken together, although no direct link was established between peri-experimental dissociation and the single item shame measure but state shame did occur in the presence of spontaneous dissociation, further investigation of the reasons dissociation cued experiences of shame is warranted, and maybe assisted by qualitative insights.

Qualitative observations. Qualitative observations corroborate the significant relationship identified between spontaneous dissociation and increases in state shame in the present study, and also identify disconnection and feelings of being a failure as more specific elements about dissociation that cause an increase in feelings of shame. One participant stated that shame was directly related to his reliance on dissociation as a means of coping with overwhelming affects: "I accept that dissociation let me survive but … I don't like it that I still need to dissociate, shame is directly connected to dissociation", while another participant stated that the "experience of dissociation now causes me embarrassment and shame".

These statements again raise the question concerning why dissociation is appraised as shameful. One participant stated feeling shame due to "feeling disconnected", and two participants both identified that they felt ashamed of "drifting off", leaving them unable to remain focused on the procedure. Both of these participants reported that this resulted in "feeling like a failure", and one participant noted that when she was aware that she had disconnected from the induction experience she had thoughts and feelings related to being a "bad person", a central cognition of shame (Lewis, 1971; Nathanson, 1992; Tangney & Dearing, 2002).

It may be that shame caused by dissociation is driven by idiosyncratic appraisals about dissociation occurring. Participants' responses indicated that both the reliance on dissociation and the uncontrollability of it occurring were elements of dissociation which caused them shame. Indeed, Gilbert (1997) states that during shame the focus is inwardly directed at the failure to control oneself. Additionally, other participants appraised the experience of feeling disconnected (i.e., "drifting off") that occurred during the induction as a failure, and therefore shameful. Such inward directed shame appraisals (e.g., "I am a failure", "I am bad") are described by Nathanson (1992) as an attack-self style of shame coping, and are often employed as a coping strategy by a complex trauma population in response to shame (Dyer et al., 2016). Feeling like a failure might also be connected with seeing the self as flawed and exposed.

However, others were less able to identify the occurrence of shame in response to dissociation, but described shame as somehow linked to the dissociative process: "As soon as I see those words (referring to the statements describing dissociation), I'm gone, and I see myself as shame", and "during the induction I experienced flashbacks of myself as a child, this caused me to feel anxiety and then dissociation. Shame is a part of the experience of dissociation, dissociation is uncontrollable", and finally:

> "Shame is part of a deeply ingrained pattern. The (task) prompted dissociation automatically, that brings up a lot of shame either because of the content (shame is a part of the content of the memories) or because shame is a part of a matrix of interconnected emotions. The experience involved dissociation coloured by shame, so it all comes together (in the present)".

A tentative hypothesis could be formulated regarding the shame inducing elements of dissociation. It could be that increases in feelings of shame occurring within an experimental

dissociation induction context could be related to an exposure of ones flaws to another, and that some individuals might appraise dissociation as a flaw that has been exposed. However, more specific assessment of this hypothesis is required.

Recalled dissociation procedure – Acute dissociation and state shame. Further analysis of this relationship via recalling memories of past dissociative experiences did not yield a significant increase in state shame, and thus does not provided support for the above finding. It is possible that shame experienced during this task was driven not by spontaneous or acute dissociative experiences, but rather encoded in the memories recalled. Platt et al. (2016) suggested that following a dissociation induction procedure, shame might have been related to cued trauma experiences. Matos and Pinto-Gouveia (2010) suggest that early shame memories, are associated with both shame proneness and current feelings of shame, and hold traumatic characteristics such as intrusions, flashbacks and dissociation. And others have found that shame, and alterations in self-perception have been found to be a response to trauma (Amstadter & Vernon, 2008; Dyer et al., 2013). It could be that memories of dissociation hold traumatic characteristics and thus also encompass shame, but such shame was not elevated in this study.

Self-reported reasons for shame. Although state shame or shame measured by a self-reported single item measure did not significantly increase in the presence of spontaneous dissociation cued by memories of past dissociation, a number of participants did report experiencing shame during the dissociation recall procedure. Of those, the majority of participants reported shame was directly related to feelings of exposure during the task. In addition, of those who indicated a sense of exposure, the most predominant other explanation for shame was feeling flawed.

Qualitative Observations. Qualitative observations support this. A majority of participants described re-experiencing shame during the task related to historic feelings generated by distressing experiences. For example, one participant stated that "the memory was not a happy memory, and feelings from the memory – I am re-experiencing them again now" and another that "it was a memory of being shamed, belittled, and told I am no good. Recalling this memory bought shame to the present."

Taken together, these results indicate that in the presence of recalling and writing about memories of past dissociation, the sense of having ones perceived flaws exposed generates shame, even when objective exposure is limited; but this might be explained by cued experiences of shame encoded within the memory (Matos & Pinto-Gouveia, 2010) rather than feeling ashamed due to thinking about past dissociation.

Peri-experimental dissociation. Finally, comparisons of total peri-experimental dissociation across the induction and recalled dissociation procedures identified a non-significant trend towards more spontaneous dissociation in a task which attempted to induce dissociation than spontaneous dissociation related to a task designed to activate recall of dissociative memories. Given a significant relationship was found between spontaneous peri-experimental dissociation and state shame following the induction task, and this task almost produced significantly more dissociation, a tentative hypothesis could be that as spontaneous in-the-moment dissociation increases, feelings of state shame intensify.

Practical and Theoretical Implications

The ideas presented in this current study have potentially important implications for existing literature exploring both dissociation and shame. By building on existing findings, it provides further evidence for a causal interplay between shame and dissociation, where dissociation might act as a means of regulating shame state, but state shame also seems to be

activated in the presence of high levels of in-the-moment dissociation, at least in a population of adults with sexual abuse histories. Further, the current study contributes novel evidence that makes more specific the relationship between dissociation and shame. Shame was found to significantly intensify in response to spontaneous dissociation which occurred when exposed to a task aimed to induce dissociation, but shame was not related to spontaneous dissociation following exposure to a task that activated recall of dissociative memories.

A non-significant trend also indicated that as spontaneous dissociation intensified state shame was activated; and the subjective reasons for shame activation were explored. These insights may have important implications for the field of mental health, specifically for the treatment of adults who experienced childhood sexual abuse. Therapists should be aware that as dissociation intensifies in-the-moment during therapy, patients may start to experience an activation of shame, which could potentially connect with ideas around having their perceived flaws exposed. With this understanding, therapists may begin to discuss what it feels like for a person to be in that state with the therapist, to see if perceptions around shame can be explored.

More generally, the current study may bring more into collective awareness the magnitude of the impact that early sexual traumas have, especially on males. Past research regarding shame and dissociation in the aftermath of childhood sexual abuse has largely drawn on female participants (e.g., Talbot et al., 2004; Platt et al., 2016). This could be due to prior evidence that females are more shame-prone than men (Else-Quest, Higgins, Allison, & Morton, 2012). However, those who have addressed a male population have reported themes of pathological shame and dissociation in male survivors of childhood sexual abuse (e.g., Dorahy & Clearwater 2012; Lew, 2004; Lisak, 1994; Spiegel, 2003). The current research, while not exclusively addressing a male only population, gives support to this growing literature base.

Methodological Considerations.

Several aspects of the current study may have limited the research in various ways. A clinical population of males with a history of childhood sexual abuse was initially intended as the population of interest for the current study, however, the number of participants able to be recruited was insufficient. The inclusion of females in the recruitment processes only yielded two participants, and therefore the ratio of males and females in the study was significantly skewed towards males. Additionally, total recruitment did not fulfil the criteria for an adequately powered study. Although a large effect size was reported for spontaneous dissociation and state shame scale scores, the small sample size may have obscured other findings, thus interpretation of these results should be with caution, but viewed within the context of emerging results from additional literature.

All participants were either attending a peer support group, were receiving counselling, or had attended counselling in the past. Therefore, it could be that the results are not generalisable to all populations. Studies which examine the interplay between shame and dissociation may benefit from examination in other populations. In addition, the small sample size skewed significantly towards a male group is also likely to limit generalisability, however multiple studies report no gender difference in dissociation (Sar, Onder, Killincaslan, Zoroglu, & Aalyanak, 2014; Spitzer et al, 2003), but women might be more shame-prone than men (Else-Quest et al., 2012).

The methodology selected for dissociation induction was one that is supported in existing literature (i.e., Platt et al., 2016; Zoellner et al., 2007) and was identified as the most suitable to the current research. However, analysis showed that the specific induction procedure employed was unable to differentiate peri-experimental dissociation across planned experimental and control conditions (dissociation or relaxation induction

experience). This may have been due to an inadequately powered study, or to alterations made in the induction procedure from that of Zoellner et al. (2007), or the sensitivity of the induction in a traumatised, primarily male, sample. Additionally, the impact on shame of the relationship context in which dissociation occurs was unable to be addressed within the chosen methodology as planned. Similarly, the methodology designed to assess the impact of recalled memories of dissociation which had occurred across relationship contexts was also unsuccessful, contrary to prior literature (e.g., Winter et al., 2015). Therefore, differentiating peri-experimental dissociation between experimental and control groups, or assessing the impact of the relationship context in which dissociation had occurred on current feelings of shame was again, unable to be addressed. Thus the current study could not give consideration to the hypotheses as planned.

Finally, according to Crozier (2014), there is a distinction between shame and embarrassment which can be clearly defined, however the lay-person might find distinguishing the two to be difficult. To mitigate this, single items "did you feel ashamed" and "did you feel embarrassed" during the task were collapsed, and participants were asked to further elaborate on their experience of shame if they identified experiencing either shame or embarrassment. However, it is possible that some participants identified shame due to uncontrollable factors external to the manipulations, for example the presence of the investigator, or feelings of exposure related to their attendance to support services for survivors of sexual abuse. For instance, one participant stated he felt shame: "knowing that you (the primary investigator) know I attend Male Survivors, and know that I have been sexually abused" and another reflected that being a part of the research had reduced him to "feeling like a statistic".

Future Research

Future research should focus on replication of the current findings in a larger and more diverse population group. Additionally, replication should consider means of further exploration of the initial findings regarding potential shame inducing elements of dissociation, building on indications that participants experienced a sense of disconnection, exposure and feelings of being flawed in relation to shame during the induction task. Lastly, future research should incorporate assessment of the impact of the interpersonal setting that dissociation occurs on shame, as the current study was unable to address this, but other studies have indicated an impact (McKeogh et al., 2018).

Results from the present study indicate that shame is activated when dissociation is occurring in the present moment, following a current induction rather than when retrieving dissociation memories. This seems to suggest that shame responses are specific to reactive dissociation associated with current induction, which might better reflect the subjective experience of the individual experiencing dissociation at the time. For example, it could be that within the therapist – patient context, it is only when dissociation is occurring *in response* to an event between the therapist and patient that shame is directly activated, whereas, when the patient is recalling dissociation which has occurred in the past, it is less evident. Future research should seek to clarify these considerations.

Moreover, the measurement of shame might benefit from inclusion of shame-driven behaviours following induction procedures. The subjective experience of shame is often accompanied by observable shame behaviours, such as aversion of eye gaze, and lowering of the head (Tracy & Robins, 2007; Schimmenti, 2012) which could strengthen measurement of shame as it occurs, without reliance on self-report.

Lastly, a tentative hypothesis drawn from the study indicates that as in-the-moment dissociation experiences increase, feelings of shame seem to intensify. Further consideration of this potential relationship could assist is making more specific the significant relationship between in-the-moment experiences of dissociation and acute feelings of shame.

Conclusions

Support was found for the question central to this thesis: does increased state dissociation cause more feelings of in-the-moment shame? The present study found that increased state shame was a result of acute dissociative experiences. This provides more evidence for the relationship between shame and dissociation identified in the literature, where experiences of state shame induce reactive experiences of dissociation, and spontaneous experiences of dissociation causes more feelings of shame.

Additionally, it was found that while spontaneous dissociation occurring in-the-moment was significantly related to increased state shame, dissociation in-the-moment associated with past memories of dissociation was not. A trend was identified towards more dissociation occurring following the induction procedure than after the recalled dissociation procedure. Taken together, perhaps the intensity of spontaneous dissociation is a key regulator of shame activation, or the factors activating shame during the induction task were more pertinent than during the memory task.

References

Andrews, B., Qian, M., & Valentine, J. D. (2002). Predicting depressive symptoms with a new measure of shame: The Experiences of Shame Scale. *British Journal of Clinical Psychology, 41,* 29-42.

Amstadter, A. B., & Vernon, L. L. (2008). Emotional reactions during and after trauma: A comparison of trauma types. *Journal of Aggression, Maltreatment & Trauma, 16*(4), 391-408. doi:10.1080/10926770801926492

Barlow, M. R., & Freyd, J. J. (2009). Adaptive dissociation: Information processing and response to betrayal. In P. F. Dell, & J. A. O'Neil (Eds), *Dissociation and the dissociative disorders: DSM-V and beyond* (pp. 93-105). New York: Routledge.

Blum, A. (2008). Shame and guilt, misconceptions and controversies: A critical review of the literature. *Traumatology, 14*(3), 91-102. doi:10.1177/1534765608321070

Blizard, R. A., & Bluhm, A. M. (1994). Attachment to the abuser: Integrating object-relations and trauma theories in treatment of abuse survivors. *Psychotherapy: Theory, Research, Practice, Training, 31*(3), 383-390. doi:10.1037/0033-3204.31.3.383

Bose, J. (2016). Dissociative process and the depressed patient. *Contemporary Psychoanalysis, 52*(1), 51-75. doi: 10.1080/0010753.2015.1126800

Bolby, J. (1988). *A secure base.* London: Routledge.

Braun, B. G. (1988). The BASK model of dissociation. *Dissociation: Progress in Dissociative Disorders, 1*(1), 4-23.

Bremner, J. D., Krystal, J. H., Putnam, F. W., Southwick, S. M., Marmar, C., Charney, D. S., & Mazure, C. M. (1998). Measurement of dissociative states with the Clinician-Administered Dissociative States Scale (CADSS). *Journal of Traumatic Stress, 11*(1), 125-136.

Brewin, C. R., Ma, B. Y. T., & Colson, J. (2013). Effects of experimentally induced dissociation on attention and memory. *Consciousness and Cognition, 22*(1), 315-323.

Brown, R. J. (2006). Different types of dissociation have different psychological mechanisms. *Journal or Trauma and Dissociation, 7*(4), 7-28.

Budden, A. (2009). The role of shame in posttraumatic stress disorder: A proposal for a socio- emotional model for DSM-V. *Social Science & Medicine, 69*(1), 1032-1039. doi:10.1016/j.socsimed.2009.07.032

Calamari, E., & Pini, M. (2003). Dissociative experiences and anger proneness in late adolescent females with different attachment styles. *Adolescence, 38*(150), 287-303. Retrieved from http://search.proquest.com.ezproxy.canterbury.ac.nz/docview/195939104?accountid=14499

Caputo, G. B. (2013). Strange-face illusion during inter-subjective gazing. *Consciousness and Cognition, 22,* 324-329.

Caputo, G. B. (2015). Dissociation and hallucination in dyads engaged through interpersonal gazing. *Psychiatry Research, 228,* 659-663.

Carlson, E. B., & Putnam, F. W. (1993). An update on the Dissociative Experiences Scale. *Dissociation, 11*(1), 16-27.

Carlson, E. B., Putnam, F. W., Ross, C. A., Anderson, G., Clark, P., Torem, M., … & Dill, D. (1991). Factor analysis of the Dissociative Experiences Scale: A multicentre study. In B. G. Braun & E. B. Carlson (Eds.), *Proceedings of the eights international conference on multiple personality and dissociative states* (p. 16). Chicago: Rush Presbyterian.

Codrington, R. (2017). Trauma, dissociation and chronic shame – Reflections for couple of family practice: An interview with Kathy Steele. *Australian & New Zealand Journal of Family Therapy, 38*(4), 669-679. doi: 10.1002/anzf.1275

Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blastein, M., Cloitre, M, … van der Kolk, B. (2005). Complex trauma in children and adolescents. *Psychiatric Annals, 35*, 390-398.

Crozier, W. R. (2014). Differentiating shame from embarrassment. *Emotion Review, 6*(3), 269-276. doi: 10.1177/1754073914523800

Dalenberg, C. J., Brand, B. L., Gleaves, D. H., Dorahy M. J., Loewenstein R. J., Cardena, E … & Spiegel, D. (2012). Evaluation for the evidence for the trauma and fantasy models of dissociation. *Psychological Bulletin, 138*(3), 550-588. doi: 10.1037/a0027447

Dalenberg, C. J., & Paulson, K. (2009). The case for the study of normal dissociation processes. In P. F. Dell & J. A. O'Neil (Eds.), *Dissociation and the Dissociative Disorders* (pp.145-154). New York, NY: Routledge.

Dell, P. F. (2009). The phenomena of pathological dissociation. In P. F. Dell & J. A. O'Neil (Eds.), *Dissociation and the dissociative disorders. DSM-V and beyond* (pp.225-237). New York, United States of America: Routledge, Talyor & Francis Group.

Dorahy, M. J. (2010). The impact of dissociation, shame, and guilt on interpersonal relationships in chronically traumatized individuals: A pilot study. *Journal of Traumatic Stress, 23*(5), 653-656. doi:10.1002/jts.20564

Dorahy, M J., & Clearwater, K. (2012). Shame and guilt in men exposed to childhood sexual abuse: A quantitative investigation. *Journal of Child Sexual Abuse, 21*(2), 155-175. doi: 10.1080/10538712.2012.659803

Dorahy, M. J., Corry, M., Black, R., Matheson, L., Coles, H., Curran, D., . . . Dyer, K. F. W. (2016). Shame, dissociation, and complex PTSD symptoms in traumatized psychiatric and control groups: Direct and indirect associations with relationship distress. *Journal of Clinical Psychology*. doi:10.1002/jclp.22339

Dorahy, M. J., Corry, M., Shannon, M., MacSherry, A., Hamilton, G., McRobert, G., … Hanna, D. (2009). Complex PTSD, interpersonal trauma and relational consequences: Findings from a treatment-receiving Northern Irish sample. *Journal of Affective Disorders, 112*(1), 71-80. doi: 10.1016/j.jad.2008.04.003

Dorahy, M. J., Corry, M., Shannon, M., Webb, K., McDermott, B., Ryan, M., & Dyer, K. F. W. (2013). Complex trauma and intimate relationships: The impact of shame, guilt and dissociation. *Journal of Affective Disorders, 147*(1). 72-79. doi: 10.1016/j.jad.2012.10.010

Dorahy, M. J., McKendry, H., Scott, A., Yogeeswaran, K., Martens, A., & Hanna D. (2017). Reactive dissociative experiences in response to acute increases in shame feelings. *Behaviour Research and Therapy, 89*(1), 75-85. doi: 10.1016/j.brat.2016.11.007

Dorahy, M. J., Schumaker, J. F. (1997). Dissociative functioning and its relationship to state and trait guilt in non-clinical population. *Personality and Individual Differences, 23*(6), 967-972. Doi: 10.1016/S0191-8869(97)00118-9

Draijer, N., & Langeland, W. (1999). Childhood trauma and perceived parental dysfunction in the etiology of dissociative symptoms in psychiatric inpatients. *American Journal of Psychiatry, 156,* 379-385.

Dutra, L., Bureau, J.F., Holmes, B., Lycbchik, A., & Lyons-Ruth, K. (2009). Quality of early care and childhood trauma: A prospective study of developmental pathways to

dissociation. *The Journal of Nervous and Mental Disease, 197*(6), 383-390. doi: 10.1097/NMD.0b013e3181a653b7

Dutra, L., Callahan, K., Forman, E., Mendelshon, M., & Herman, J. (2008). Core schemas and suicidality in a chronically traumatized population. *The Journal of Nervous and Mental Disease, 196*(1), 71-74. doi:10.1097/NMD.0b013e31815fa4c1

Dyer, K. F. W., Dorahy, M. J., Corry, M., Black, R., Matheson, L., Coles, H., . . . Middleton, W. (2016). Comparing Shame in Clinical and Nonclinical Populations: Preliminary Findings. *Psychological Trauma: Theory, Research, Practice, and Policy*. doi:10.1037/tra0000158

Dyer, K. F. W., Dorahy, M. J., Shannon, M., & Corrie, M. (2013). Trauma typology ass a risk factor for aggression and self-harm in a complex PTSD population: The mediating role of alterations in self-perception. *Journal of Trauma and Dissociation, 14*(1), 56-68. doi: 10.1080/15299732.2012.710184

Ellenberger, H. F. (1970). *The discovery of the unconscious: The history and evolution of dynamic psychiatry.* London: Allen Lane the Penguin Press.

Else-Quest, N. M., Higgins, A., Allison, C., & Morton, L. C. (2012). Gender differences in self-conscious emotional experience: A meta-analysis. *Psychological Bulletin, 138*(5), 947-981. doi: 10.1037/a0027930

Feeny, N. C., Zoellner, L. A., & Foa, E. B. (2000). Anger, dissociation, and posttraumatic stress disorder among female assault victims. *Journal of Traumatic Stress, 12*(1), 89-100. doi:10.123/A:100772525015225

Fergusson, T. J. (2005). Mapping shame and its function in relationships. *Child Maltreatment, 10*(4), 377-386. doi: 10.1177/10077559505281430

Freyd, J. J. (1994). Betrayal trauma: traumatic amnesia as an adaptive response to childhood abuse. *Ethics and Behavior, 4*(4), 307-329. doi:10.1207/s15327019eb0404_1

Freyd, J. J. (1996). *Betrayal trauma: The logic of forgetting childhood abuse.* Cambridge, MA: Harvard University Press.

Frischholz, E. J., Braun, B. G., Sasch, R. G., Schwartz, D. R., Lewis, J., Schaeffer, D., Westergaard, C., & Pasquotto, J. (1990). Construct validity of the Dissociative Experiences Scale: The relation between the DES and hypnotisability. *American Journal of Clinical Hypnosis, 35,* 145-152.

Fromuth, M. E., & Burkhart, B. R. (1989). Long-term psychological correlates of childhood sexual abuse in two samples of college men. *Child Abuse and Neglect, 13*, 533-542.

Garfinkle, E. (2012). Shame: The hidden resistance. *Canadian Journal of Psychoanalysis, 20*(1), 44-69.

Gilbert, P. (1989). *Human Nature and Suffering*. Hove: Lawrence Erlbaum Associates Ltd.

Gilbert, P. (1997). The evolution of social attractiveness and its role in shame, humiliation, guilt and therapy. *British Journal of Medical Psychology, 70*, 113-147.

Gilbert, P. (2003). Evolution, social roles, and the differences in shame and guilt. *Social Research, 70*(4), 1205-1230.

Gilbert, P., & Andrews, B. (1998). Shame: Interpersonal behaviour, psychopathology, and culture. Oxford: University Press.

Goodwin, J. (1985). *Post-traumatic symptoms in incest survivors*. In S. Eth, & R. S. Pynoos (Eds). Washington, DC: American Psychiatric Press.

Goodwin J. (2010). Snow white and the seven diagnoses. In V. Sinason, *Attachment, trauma and multiplicity* (2nd ed, pp. 139-149). Taylor and Francis. Retrieved from http://ebrary.com

Herman, J. L., (2011). Posttraumatic stress disorder as a shame disorder. In R. L. Dearing & J. P. Tangney (Eds.), *Shame in the Therapy Hour* (pp. 261-275). Washington, DC: American Psychological Association.

Holmes, E. A., Brown, R. J., Mansell, W., Fearon, R P., Hunter, E. C. M., Frasquilho, F., & Oakley, D. A. (2005). Are there two qualitatively distinct forms of dissociation? A review and some clinical implications. *Clinical Psychology Review, 25*(1). 1-23. doi:10.1016/j.cpr.2004.08.006

Humpston, C. S., Walsh, E., Oakly, D A., Mehta, M. A., Bell, V., & Deeley, Q. (2016). The relationship between different types of dissociation and psychosis-like experiences in a non-clinical sample. *Consciousness and Cognition, 41,* 83-92. doi: 10.1016/j.concog.2016.02.009

Hunter, J. A. (1991). A comparison of the psychosocial maladjustment of adult males and females sexually molested ass children. *Journal of Interpersonal Violence, 6*(2), 205-217. doi: 10.1777/088626091006002005

Hunter, E. C. M., Sierra, M., & David, A. S. (2004). The epidemiology of depersonalisation and derealisation: A systematic review. *Social Psychiatry and Psychiatric Epidemiology, 39*(1), 9-18. doi: 1.1007/s00127-004-071-4

International Society for the Study of Trauma and Dissociation. (2011). Guidelines for treating Dissociative Identity Disorder in adults, third revision. *Journal of Trauma & Dissociation, 12*(2), 115-187. doi: 10.1080/15299732.2011.537247

Irwin, H. J. (1998). Affective predictors of Dissociation II: Shame and Guilt. *Journal of Clinical Psychology, 54*(2), 237-245.

Kaufman, G. (1996). *The psychology of shame: theory and treatment of shame-based syndromes* (Vol. 2nd). New York: Springer Pub. Co.

Kilborne, B. (1995). Of creatures large and small; Size anxiety, psychic size, shame and the analytic situation. *Psychoanalytic Quarterly, 64,* 672-690. Retrieved from http://benjaminkilborne.com

Kilborne, B. (1999). When trauma strikes the soul: Shame, splitting, and psychic pain. *American Journal of Psychoanalysis, 59*(4), 385-402. Retrieved from http://search.proquest.com

Kim, J., Talbot, N. L., & Cicchetti, D. (2009). Child abuse and current interpersonal conflict: The role of shame. *Child Abuse & Neglect, 33*(6)*,* 362-371. doi: 10.1016/j.chiabu.2008.10.003

Kluft, R. P. (1995). Six completed suicides in dissociative identity disorder patients: Clinical observations. *Dissociation, 8*(2), 104-111.

Kluft, R. P. (2016). The wounded self in trauma treatment. *American Journal of Clinical Hypnosis, 59*(1), 69-87. doi: 10.1080/00029157.2016.1163659

Lanuis, R. A., Williamson, P. C., Boksman, K., Densmore, M., Gupta, M., Neufeld, R. W., Giat, J. S., & Menon, R. S. (2002). Brain activation during script-driven imagery induced in dissociative responses in PTSD: A functional magnetic resonance imaging investigation. *Biological Psychiatry, 52*, pp. 35-311. doi: 10.1080/15299732.2016.1194358

Lew, M. (2004). *Victims no longer: The classic guide for men recovering from sexual child abuse* (2nd ed.). New York, New York: HarperCollins.

Lewis, H. B. (1971). Shame and guilt in neurosis. *Psychoanalytic review, 58*(3), 419-438.

Lewis, M. (1992). *Shame: The exposed self.* New York; Toronto: Free Press.

Lewis, M. (2003). The role of the self in shame. *Social Research, 70*(4), pp 1181-1204.

Lewis, M., & Michalson, L. (1983). *Children's emotions and moods: Developmental theory and management.* New York: Plenum.

Lisak, D. (1994). The psychological impact of sexual abuse: Content analysis of interviews with male survivors. *Journal of Traumatic Stress, 7*(4), 525-548.

Lowe, M., & Balfour, B. (2015). The unheard victims. *The Psychologist, 28*(2), 118-121.

Ludascher, P. G., Valerius, G., Stiglmayr, C., Mauchnik, J., Lanius, R. A., Bohus, M., Schmahl, C. (2010). Pain sensitivity and neural processing during dissociative stated in patients with borderline personality disorder with and without comorbid posttraumatic stress disorder: A pilot study. *Journal of Psychiatry Neuroscience, 35,* pp. 177-184.

Lyons-Ruth, K. (1999). The two-person unconscious: Intersubjective dialogue, enactive relational representation, and the emergence of new forms of relational organization. *Psychoanalytic Inquiry, 19,* 576-617.

Lyons-Ruth, K. (2003). Dissociation and the parent-infant dialogue: a longitudinal perspective from attachment research. *Journal of the American Psychoanalytic Association, 51*(3), 883-911. doi:10.1177/00030651030510031501

Lyons-Ruth, K. (2008). Contributions of the mother–infant relationship to dissociative, borderline, and conduct symptoms in young adulthood. *Infant Mental Health Journal, 29*(3), 203-218. doi:10.1002/imhj.20173

Marshall, G.N., Orlando, M., Jaycox, L. H., Foy, D. W., & Belzberg, H. (2002). Development and validation of a modified version of the Peritraumatic Dissociative Experiences Questionnaire. *Psychological Assessment, 14*(2), 123-134.

Marschall, D., Sanftner, J., & Tangney, J. P. (1994). The State Shame and Guilt Scale. Fairfax, VA: George Mason University

Marmar, C. R., Weiss, D. S., & Metzler, T. J. (1997). The Peritraumatic Dissociative Experiences Questionnaire. In. J. P. Wilson & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD* (pp.412-428). New York: Guilford Press.

Matos, M., & Pinto-Gouveia, J. (2010). Shame as a traumatic memory. *Clinical psychology & psychotherapy, 17*(4), 299-n/a. doi:10.1002/cpp.659

Mazzotti, E., Farina, B., Imperatori, C., Mansutti, F., Prunetti, E., Speranza, A. M., & Barbaranelli, C. (2016). Is the Dissociative Experiences Scale able to identify detachment and compartmentalization symptoms? Factor structure of the Dissociative Experiences Scale in a large sample of psychiatric and non-psychiatric subjects. *Neuropsychiatric Disease and Treatment, 12*, 1295-1302.

McKeogh, K., Dorahy, M. J., & Yogeeswaran, K. (2018). The activation of shame following dissociation in the context of relationships: A vignette study. *Journal of Behavior Therapy and Experimental Psychiatry, 59*, 48-55. doi:10.1016/j.jbtep.217.11.01

Middleton, W. (2005). Owning the past, claiming the present: Perspectives on the treatment of dissociative patients. *Australasian Psychiatry, 13*(1). 40-49. ISSN: 1440-1665

Nathanson, D. L. (1992). *Shame and pride: Affect, sex and the birth of the self*. New York, New York: Norton.

Platt, M., & Freyd, J. (2012). Trauma and negative underlying assumptions in feelings of shame: An exploratory study. *Psychological Trauma: Theory, Research, Practice, and Policy, 4*(4), 370-378. doi:10.1037/a0024253

Platt, M. G., & Freyd, J. J. (2015). Betray me trust, shame on me: Shame, dissociation, fear, and betrayal trauma. *Psychological Trauma: Theory, Research, Practice, and Policy, 7*(4), 398-404. doi:10.1037/tra0000022

Platt, M. G., Luoma, J. B., & Freyd, J. J. (2016). Shame and dissociation in survivors of high and low betrayal trauma. *Journal of Aggression, Maltreatment & Trauma,* 1-16. doi: 10.1080/10926771.2016.1228020

Putnam, F. (1997). *Dissociation in children and adolescents: A developmental perspective.* New York, London: The Guilford Press.

Richardson, S. (2010). Will you sit by her side? An attachment-based approach to work with dissociative conditions. In V. Sinason, *Attachment, trauma and multiplicity* (2nd ed, pp. 150-165). Taylor and Francis. Retrieved from http://ebrary.com

Rodewald, F., Dell, P. F., Wilhelm-Gößling, C., & Gast, U. (2011). Are major dissociative disorders characterised by a qualitatively different kind of dissociation? *Journal of Trauma and Dissociation, 12*(1), 9-24. doi: 10.1080/15299732.2010.514847

Ross, C. A., Ellason, J. W., & Anderson, G. (1995). A factor analysis of the Dissociative Experiences Scale (DES) in dissociative identity disorder. *Dissociation, 8*(4), 229-235.

Ross, C. A., Joshi, S., Currie, R. (1991). Dissociative experiences in the general population: A factor analysis. *Hospital and Community Psychiatry, 42,* 297-301.

Rugens, A., & Terhune, D. B. (2013). Guilt by dissociation: Guilt primes augment the relationship between dissociative tendencies and state dissociation. *Psychiatry Research, 206*(1)*,* 114-116. doi: 10.1016/j.psychres.2012.09.010

Salley, R. D., & Teiling , P. A. (1984). Dissociated rage attacks in a Vietnam Veteran: A Rorschach study. *Journal of Personality Assessment, 48*(1), 98-101.

Sar, V., Onder, C., Killincaslan, A., Zoroglu, S. S., & Aalyanak, B. (2014). Dissociative Identity Disorder among adolescents: Prevalence in a university psychiatric outpatient unit. *Journal of Trauma and Dissociation, 15*(4), 402-419. doi: 10.1080/15299732.2013.864748

Scheff, T. J., & Retzinger, S. M. (2000). Shame as the master emotion of everyday life. *Journal of Mundane Behaviour, 1*(3), 303-324.

Schimmenti, A. (2012). Unveiling the hidden self: Developmental trauma and pathological shame. *Psychodynamic Practice. Individuals, 18*(2), 195-211. doi: 10.180/14753634.2012.664873

Simeon, D., Greenbery, J., Nelson, D., Schmeilder, J., & Hollander, E. (2005). Dissocation and posttraumatic stress 1 year after the World Trade Centre disaster: Follow-up of a longitudinal survey. *The Journal of Clinical Psychiatry, 66*(2), 231-237. doi: 10.4088/JCP.v66n0212

Simeon, D., Riggo-Rosen, A., Guralnik, O., Knutelska, M., & Nelson, D. (2008). Depersonalisation disorder: Dissociation and affect. *Journal of Trauma & Dissociation, 4*(4), 63-76. doi: 10.1300/J229v04n04_05

Sinclair, R. C., Soldat, A. S., & Ryan, C. A. (1997). Development and validation of a velten-like image oriented anxiety and serenity mood inductions. *Basic and Applied Social Psychology, 19*(2), 163-182. doi:10.1207/s15324834basp1902_2

Spiegel, J. (2003). *Sexual abuse of males: The SAM model of theory and practice.* East Sussex, Great Britain: Brunner-Routledge.

Spitzer, C., Klauer, T., Grabe, H., Lucht, M., Stieglitz, R., Schneider, W., & Freyberger, H. J. (2003). Gender difference in dissociation: A dimensional approach. *Psychopathology, 36*(2), 65-70. doi: 10.1159/000070360

Steele, K., Dorahy, M. J., van der Hart, O., & Nijenhuis, E. R. S. (2009a). Dissociation versus alterations in consciousness: Related but different concepts. In P. F. Dell & J. A. O'Neil (Eds.), *Dissociation and the Dissociative Disorders. DSM-V and beyond* (pp.155-169). New York, United States of America: Routledge.

Steele, K., Van Der Hart, O., & Nijenhuis, E. R. S. (2009b). The theory of trauma-related structural dissociation of the personality. In P. F. Dell & J. A. O'Neil (Eds.), *Dissociation and the Dissociative Disorders. DSM-V and beyond* (pp.155-169). New York, United States of America: Routledge.

Stein, A. (2009). From their cradle to your grave: How child abuse and dissociation drive violent crime. *The Journal of Psychohistory, 36*(4), 320-327.

Stiglmayr, C. E., Schmahl, C., Bremner, J. D., Bohus, M., Ebner-Priemer, U. (2009). Development and psychometric characteristics of the DSS-4 as a short instrument to assess dissociative experiences during neuropsychological experiments. *Psychopathology, 42*(6), pp.139-147.

Stockdale, G. D., Gridley, B. E., Balogh, D. W., & Holtgraves, T. (2002). Confirmatory factor analysis of single- and multiple-factor competing models of the Dissociative Experiences Scale in a nonclinical sample. *Assessment, 9*(1), 94-106.

Talbot, J. A., Talbot, N. L., & Tu, X. (2004). Shame-proneness as a diathesis for dissociation for women with histories of childhood sexual abuse. *Journal of Traumatic Stress, 17*(5), 445-448. doi: 10.1023/B:JOTS.0000048959.29766.ae

Tangney, J. P. (1996). Conceptual and methodological issues in the assessment of shame and guilt. *Behaviour Therapy and Research, 34*(9), 741-753.

Tangney, J. P., & Dearing, R. L. (2002). *Shame and Guilt.* New York, NY: Guilford Press.

Thomson, P., & Jaque, S. V. (2013). Exposing shame in dancers and athletes: Shame, trauma and dissociation in a nonclinical population. *Journal of Trauma and Dissociation, 14*(4), 439-454. doi: 10.1080/15299732.2012.757714

Tomkins, S. S. (1963). *Affect imagery consciousness, 2: The negative affects.* New York: Tavistock/Routledge.

Tracey, J. L., & Robins, R. W. (2004). Putting the self into self-conscious emotions: A theoretical model. *Psychological Inquiry, 15*(2), 103-125. doi: 10.1207/s15327965pli152_01

Tracey, J. L., & Robins, R. W. (2007). The prototypical pride expression: Development of a non-verbal behavioural coding system. *Emotion, 7,* 789-801.

Turner, J. E. (2014). Researching state shame with the experiential shame scale. *The Journal of Psychology, 148*(5), 577-601. doi: 10.1080/00223980.2013.818927

Van der Hart, O., & Dorahy, M. J. (2009). History of the concept of dissociation. In P. F. Dell & J. A. O'Neil (Eds.), *Dissociation and the Dissociative Disorders* (pp.3-26). New York, NY: Routledge.

Van der Hart, O., & Horst, R. (1989). The dissociation theory of Pierre Janet. *Journal of Traumatic Stress, 2*(4), 397-412.

Van Der Hart, O., & Nijenhuis, E. R. E. (2011). Dissociation in trauma: A new definition and comparison with previous formulations. *Journal of Trauma & Dissociation, 12*(4), 416-445. doi:10.1080/15299732

Van der Hart, O., Nijenhuis, E. R. S., & Steele, K. (2006). *The haunted self: Structural dissociation and the treatment of chronic traumatization.* New York: Norton, 2006.

Velten, E. (1968). A laboratory task for induction of mood states. *Behaviour, Research and Therapy, 6*(4). 473-482.

Waller, N. G., Putnam, F. W., & Carlson, E. B. (1996). Types of dissociation and dissociative types: A taxometric analysis of dissociative experiences. *Psychological Methods,1*(3), 300-321. doi: 10.1037/1082-989X.1.3.300

Whewell, P. (2010). Profound desolation. The working alliance with dissociative patients in an NHS setting. In V. Sinason, *Attachment, trauma and multiplicity* (2nd ed, pp. 166-177). Taylor and Francis. Retrieved from http://ebrary.com

Winter, D., Krause-Utz, A., Lis, C., Chiu, C. D., Lanius, R. A., Schriner, F., … Schmahl, C. (2015). Dissociation in borderline personality disorder: Disturbed cognitive and emotional inhibition and its neural correlates. *Psychiatry Research, 233*(3), 339-351. doi: 10.1016/j.psychresns.2015.05.018

Zoellner, L. A., Sacks, M. B., & Foa, E. B. (2007). Dissociation and serenity induction. *Journal of Behavior therapy and Experimental Psychiatry, 38*(3), 252-262. doi: 10.1016/j.jbtep.2006.06.003

Appendix A

College of Arts
Department of Psychology

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UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Invitation letter

Emotions and Dissociation in relationships.

We are conducting a research study looking at the association between dissociation and emotions, with a special interest in how dissociation and emotions are related in different relationship settings. This research will help us further understand dissociative symptomology following distressing experiences. This study may be of interest to you and more details can be found in this letter.

This letter provides some information about the nature of the research and how to volunteer. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and talk to others about the study if you wish. If you have any questions please ask the person who gave you this letter or contact the researchers on the addresses provided below.

What is the purpose of the study?

Dissociation refers to different experiences that range from daydreams to losing track of time, to feeling disconnected from oneself. Studies have shown that dissociation is related to different emotional experiences including embarrassment, sadness, anxiety, shame and anger. This study examines whether dissociative experiences are associated with different emotions when they occurs in three different relationship contexts – when with someone close, when with an acquaintance and when alone.

Understanding the relationship between dissociation and its related emotional experiences will help therapists understand the inner experiences of individuals who experience dissociative symptoms as an outcome of distressing experiences. A better understanding of the relationship between experiencing dissociation and feelings like shame will help inform the therapeutic healing process.

To do this, we are asking people who have had distressing experiences if they would like to volunteer to help us with a study that looks at these issues.

Do I have to take part?

No, it is up to you whether you decide to take part. If you do want to be involved, please put your name and preferred contact number on the reply slip below and give it to the person who provided you with this letter. Alternatively, you can email or call the either Abbie Schultz (abbie.schultz@pg.canterbury.ac.nz) or Martin Dorahy (03 3643416;

martin.dorahy@canterbury.ac.nz), who are running the study. If you decide not to take part this will be completely understood and your therapy will not be affected.

What will happen to me if I take part?

If you decide you would like to take part Abbie Schultz (MA student) will contact you to arrange an appointment that will be suitable and convenient for you.

If you agree to participate you will attend one appointment at the University. It will be with Abbie, and you can expect the appointment to last approximately 60 minutes. When you arrive you will be asked to complete four forms, which may take up to 20 minutes. Following this, you will be assigned to one of two groups. In each group, you will be asked to reflect on two personal experiences of times when you felt dissociation or when you felt very calm and relaxed. After this you will read 20 statements off a computer screen, followed by a short paragraph that will be read to you and 2 minutes of concentrating on how the text has made you feel. These words and paragraphs will be related to feeling dissociation or feeling calm and relaxed.

You will again have three short questionnaires to complete before watching a short video about nature.

Next, you will be asked to recall and write down another memory of a time that you have either felt dissociative or calm and relaxed while with certain people, and reflect on the feeling bought about by thinking of those times. You will then be asked for complete three short questionnaires about how you were feeling and thinking about those memories.

If you would like, Abbie can work through the questionnaires with you, or you can complete them without assistance. At the end, you will receive a $10 petrol voucher to reimburse you for any travel, and a $15 Westfield voucher to reimburse you for your time.

Treatment of data.

Any information you provide us in this study will be kept confidential, meaning we cannot share your answers with anyone. Only the researchers whose names are included in this letter will have access to your data. All information will be kept anonymous by ensuring your name is not on anything that contains information you provide in the study. All information will be put together with other people in the study. The results of the study may be published in a scientific journal, but no identifying information will be given. If you wish to obtain the overall results of this study, please contact Abbie Schultz via the email address provided at the end of this letter.

Your participation in this study is completely voluntary. You can withdraw from the study at any time without having to provide a reason. This decision will have no influence on your treatment.

Participation in this study will have no health risk however, it is possible that recalling dissociative memories may be felt as unpleasant. If at any time you feel distressed, you will be asked if you wish to continue. Remember, you are under no obligation to participate, or to continue to participate in the research if you do not wish to do so.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics

Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz)

Contact Details:

You are free to ask any further questions to Abbie Schultz at abbie.schultz@pg.canterbury.ac.nz, or her supervisor Prof Martin Dorahy (University of Canterbury) on 03 364 3416 or martin.dorahy@canterbury.ac.nz. If you are interested in participating in this research, please complete the reply slip below and give it to the manager of MSSAT, or contact Abbie or Martin.

Names of research team

Abbie Schultz (Masters of Arts (Psychology) student, University of Canterbury); Ken Clearwater (Manager; MSSAT); Prof Martin Dorahy (Clinical Psychologist; University of Canterbury); Dr Kumar Yogeeswaran (Senior Lecturer, University of Canterbury).

Reply Slip

I consent to be contacted by a member of the Research team about the research project: ☐

Signed (participant): _____ Date: _____

Print name (participant) _____

Telephone: _____

Email (optional): _____

Appendix B

These questions describe experiences that you may have in your daily life. Your answer should show how often these experiences happen to you when you **ARE NOT** under the influence of alcohol or drugs. CIRCLE a number from 0% to 100% to show what percentage of the time this happens to you. If it happens 45% of the time, circle both 40% and 50%.

1. Some people have the experience of driving or riding in a car or bus or subway and suddenly realising that they don't remember what has happened during all or part of the trip.

   (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

2. Some people find that sometimes they are listening to someone talk and they suddenly realise that they did not hear part or all of what was said.

   (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

3. Some people have the experience of finding themselves in a place and having no idea how they got there.

   (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

4. Some people have the experience of finding themselves dressed in clothes that they don't remember putting on.

   (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

5. Some people have the experience of finding new things among their belongings that they do not remember buying.

   (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

6. Some people sometimes find that they are approached by people that they do not know who call them by another name or insist that they have met them before.

   (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

7. Some people sometimes have the experience of feeling as though they are standing next to themselves or watching themselves do something and they actually see themselves as if they were looking at another person.

   (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

8. Some people are told that they sometimes do not recognise friends or family members.

   (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

9. Some people find that they have no memory for some important events in their lives (for example, a wedding or graduation).

   (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

10. Some people have the experience of being accused of lying when they do not think that they have lied.

    (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

11. Some people have the experience of looking in a mirror and not recognising themselves.

    (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

12. Some people have the experience of feeling that other people, objects and the world around them are not real.

    (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

13. Some people have the experience of feeling that their body does not seem to belong to them.

    (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

14. Some people have the experience of sometimes remembering a past event so vividly that they feel as if they were reliving that event.

    (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

15. Some people have the experience of not being sure whether things that they remember happening really did happen or whether they just dreamed them.

    (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

16. Some people have the experience of being in a familiar place but finding it strange and unfamiliar.

    (NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

17. Some people find that when they are watching television or a movie they become so absorbed in the story that they are unaware of other events happening around them.

(NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

18. Some people find that they become so involved in a fantasy or daydream that it feels as though it were really happening to them.

(NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

19. Some people find that they sometimes are able to ignore pain.

(NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

20. Some people find that they sometimes sit staring off into space, thinking of nothing, and are not aware of the passage of time.

(NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

21. Some people sometimes find that when they are alone they talk out loud to themselves.

(NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

22. Some people find that in one situation they may act so differently compared with another situation that they feel almost as if they were two different people.

(NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

23. Some people sometimes find that in certain situations they are able to do things with amazing ease and spontaneity that would usually be difficult for them (for example, sports, work, social situations, etc.).

(NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

24. Some people sometimes find that they cannot remember whether they have done something or have just thought about doing this (for example, not knowing whether they have just mailed a letter or have just thought about mailing it).

(NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

25. Some people find evidence that they have done things that they do not remember doing.

(NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

26. Some people sometimes find writings, drawings, or notes among their belongings that they must have done but cannot remember doing.

(NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

27. Some people sometimes find that they hear voices inside their head that tell them to do things or comment on things that they are doing.

(NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

28. Some people sometimes feel as if they are looking at the world through a fog so that people and objects appear far away or unclear.

(NEVER) 0% 10 20 30 40 50 60 70 80 90 100 (ALWAYS)

Carlson & Putnam (1993).

Appendix C

Everybody at times can feel embarrassed, self-conscious or ashamed. These questions are about such feelings if they have occurred **at any time in the past year.** There are no 'right' or 'wrong' answers. Please indicate the response which applies to you with a tick.

		Not at all	*A Little*	*Moderately*	*Very Much*
1.	Have you felt ashamed of any of your personal habits?	( )	( )	( )	( )
2.	Have you worried about what other people think of any of your personal habits?	( )	( )	( )	( )
3.	Have you tried to cover up or conceal any of your personal habits?	( )	( )	( )	( )
4.	Have you felt ashamed of your manner with others?	( )	( )	( )	( )
5.	Have you worried about what other people think of your manner with others?	( )	( )	( )	( )
6.	Have you avoided people because of your manner?	( )	( )	( )	( )
7.	Have you felt ashamed of the sort of person you are?	( )	( )	( )	( )
8.	Have you worried about what other people think of the sort of person you are?	( )	( )	( )	( )
9.	Have you tried to conceal from others the sort of person you are?	( )	( )	( )	( )
10.	Have you felt ashamed of your ability to do things?	( )	( )	( )	( )
11.	Have you worried about what other people think of your ability to do things?	( )	( )	( )	( )
12.	Have you avoided people because of your Inability to do things?	( )	( )	( )	( )
13.	Do you feel ashamed when you do something wrong?	( )	( )	( )	( )

		Not at all	*A Little*	*Moderately*	*Very Much*
14.	Have you worried about what other people think of you when you do something wrong?	( )	( )	( )	( )
15.	Have you tried to cover up or conceal things you felt ashamed of having done?	( )	( )	( )	( )
16.	Have you felt ashamed when you said something stupid?	( )	( )	( )	( )
17.	If you have read this question, leave it blank	( )	( )	( )	( )
18.	Have you worried about what other people think of you when you said something stupid?	( )	( )	( )	( )
19.	Have you avoided contact with anyone who knew you said something stupid?	( )	( )	( )	( )
20.	Have you felt ashamed when you failed in a competitive situation?	( )	( )	( )	( )
21.	Have you worried about what other people think of you when you failed in a competitive situation?	( )	( )	( )	( )
22.	Have you avoided people who have seen you fail?	( )	( )	( )	( )
23.	Have you felt ashamed of your body or any part of it?	( )	( )	( )	( )
24.	Have you worried about what other people think of your appearance?	( )	( )	( )	( )
25.	Have you avoided looking at yourself in the mirror?	( )	( )	( )	( )
26.	Have you wanted to hide or conceal your body or any part of it?	( )	( )	( )	( )

Andrews et al. (2002).

Appendix D

The following are some statements which may or may not describe how you are feeling *right now.*
Please rate each statement using the 5-point scale below. Remember to rate each statement based on how you are feeling *right at this moment*.

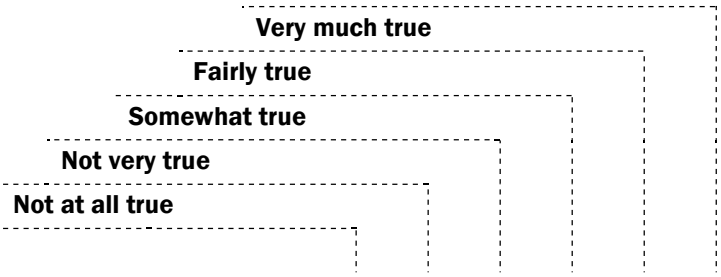
Not Feeling This Way At All	Feeling This Way Slightly	Feeling This Way Somewhat	Feeling This Way Strongly	Feeling This Way Very Strongly
0	1	2	3	4

I want to sink into the floor and disappear.	0	1	2	3	4
I feel small.	0	1	2	3	4
I feel like a bad person.	0	1	2	3	4
I feel humiliated, disgraced.	0	1	2	3	4
I feel worthless, powerless.	0	1	2	3	4

Marschall et al. (1994).

Appendix E

Instructions: Please complete the items below by circling the choice that best describes your experiences and reactions *during the audio clip and immediately afterward*. If an item does not apply to your experience, please circle "Not at all true."



1. I had moments of losing track of what was going on – I "blanked out" or felt separate from what was going on.	1	2	3	4	5
2. My sense of time changed – things seemed to be happening in slow motion.	1	2	3	4	5
3. I felt as though I were a spectator watching what was happening to me, as if I were floating above the scene or observing it as an outsider.	1	2	3	4	5
4. There were moments when my sense of my own body seemed distorted or changed. I felt disconnected from my own body, or that it was unusually large or small.	1	2	3	4	5
5. I felt as though things that were actually happening to others were happening to me – like I was being trapped when I really wasn't.	1	2	3	4	5
6. I felt confused; that is; there were moments when I had difficulty making sense of what was happening.	1	2	3	4	5
7. I felt disoriented; that is, there were moments when I felt uncertain about where I was or what time it was.	1	2	3	4	5
8. I have gaps in my memory and cannot remember parts of the experiment.	1	2	3	4	5

Marmar et al. (1997).

Appendix F

What did you feel or experience **in this activity or exercise?**

Circle the number that applies

1 = Slightly 2 = Moderately 3 = Very Much 4 = Extremely

1.	**Far away** and distant from the troubles around me	**1**	**2**	**3**	**4**
2.	**Physically Relaxed.** Muscles relaxed, loose, limp, warm and heavy. Breathing slow, even, easy	**1**	**2**	**3**	**4**
3.	**At ease, at peace.**	**1**	**2**	**3**	**4**
4.	**Refreshed.**	**1**	**2**	**3**	**4**
5.	**Pleasant mind wandering.** Undirected, random, positive thoughts.	**1**	**2**	**3**	**4**
6.	**Lost** in fantasy and **daydreaming**	**1**	**2**	**3**	**4**

Smith (2016).

Appendix G

Dissociation

Instructions. Sometimes people feel that their actions, thoughts or feelings occur outside their awareness or operate outside their control. For example, you could think of a time that you found yourself 'coming to' and not being fully aware of what has occurred or times when you have felt disconnected from a body that does not seem like your own. Think of two times that you have had these experiences when you were with someone you felt close to/were alone. Take a moment to remember these times in as much detail as you can, and when you are ready, tell me about those memories.

Now, a number of statements are going to appear on the computer screen. I'd like you to read each of them to yourself. As you look at each statement, focus your observation only on that one. You should not spend too much time on any one. Your success at coming to experience this feeling will largely depend on your willingness to accept and respond to the idea in each statement and to allow each statement to act upon you. Attempt to respond to the idea in each feeling suggested by each statement. Try to think of yourself as definitely being and moving into that state. If it is natural for you to do so, try to visualise a scene in which you have had such a feeling.

Dissociation statements.

1. Sometimes I space out about what I'm doing or where I'm going
2. I feel like I don't notice a lot of things happening
3. I feel detached and distant today
4. I do things and later realise I hadn't actually decided to do them
5. Sometimes I don't notice things that are happening around me
6. There are days when I really lose track of time
7. Unwanted memories from my past intrude into my everyday life
8. I can imagine myself in this room from above, or from outside
9. My body feels as though it does not belong to me
10. I feel frozen, like a statue, while being aware of what is going on around me
11. There are times when for no medical or physical reason all of part of my body is insensitive to pain

12. I switch back and forth between feeling that seem to belong to me, and feelings that I do not experience as my own
13. Right now I do not feel like my real self
14. A lot of things are happening that I am not aware of
15. I feel like I am not part of this experience
16. I am in a world of my own at the moment
17. I feel like a spectator, watching what is happening here
18. I am blanking out on what is happening
19. I feel paralysed or unable to move for a period of time
20. I have strong feelings that do not seem to belong to me

Mood Incubation Instructions. Now that you're feeling very detached, blank, or separate from yourself, concentrate on this experience. Feel it getting stronger and stronger, more and more detached, blank, separate from yourself. Let it continue to build. Think about things that have happened in your life that have made you feel very, very detached, blank or separate from yourself. Concentrate on it. Let yourself feel this detachment, this blankness, or this separation from yourself fully. As you do, you'll feel the experience build. It will become more intense. This in turn…. will make you think of other things in your life that have made you feel very, very detached, blank, or separate from yourself. The experience will continue to build. Feel it become more intense. Feel it get stronger and stronger. It will happen. Do and think whatever you can to build this very detached, blank, or separate from yourself experience. Feel it fully. Now close your eyes, and for the next two minutes continue to concentrate on this feeling.

Relaxation

Instructions. Sometimes people feel very calm and relaxed. For example you could think of a time when your mind was quiet and calm, or when you felt rested and carefree. Think of up to two times when you felt like this when you were with someone you felt close to/were alone. Take a moment to remember these times in as much detail as you can, and when you are ready, tell me about those memories.

Read each of the following statements to yourself. As you look at each statement, focus your observation only on that one. You should not spend too much time on any one. Your success at coming to experience this will largely depend on your willingness to accept and respond to the idea in each statement and to allow each statement to act upon you.

Attempt to respond to the feeling suggested by each statement. Then try to think of yourself as definitely being and moving into that state. If it is natural for you to do so, try to visualize a scene in which you have had such a feeling.

Relaxation Induction.

1. I feel mentally alert and calm.
2. Sometimes it's nice to get away from the noise and go to a park.
3. I feel that I maintain a hopeful, optimistic attitude.
4. I'm satisfied with my life right now.
5. I feel like humming quiet music to myself and taking a long walk.
6. Everything seems to just naturally fall into place. No Worries.
7. I have a fresh outlook on like. I'm secure in my optimism.
8. I feel knowledgeable and wise today.
9. I like to imagine myself high up on a mountain top, fresh air, so quiet.
10. I feel laid back and content.
11. I feel like I know myself well, I feel wise.
12. I feel calm and sure of myself right now.
13. Life is to be enjoyed, not worried about.
14. My muscles feel loose and heavy – so relaxed.
15. I feel that I have a certain inner peace.
16. I could really go for a lazy day at the beach.
17. I have confidence that life will go well for me.
18. If your attitude is relaxed, then things are relaxed.
19. I'm feeling wonderfully calm and pleased today.
20. I feel so calm, so happy, so serene, so relaxed, so nice.

Mood Incubation Instructions. Now that you're feeling very relaxed, concentrate on this feeling. Feel it getting stronger and stronger; more and more peaceful. Let it continue to build. Think about things that have happened in your life that have made you feel very, very relaxed. Concentrate on it. Let yourself feel very calm, tranquil, very peaceful, very laid-back. As you do, you'll feel the mood build. It will become more and more relaxed. This in turn will make you think of other things in your life that have made you feel very, very relaxed. The mood will continue to build. Feel it become more intense. Feel it get stronger and stronger. It will happen. Do and think whatever you can to build this very relaxed mood.

Feel very very relaxed. Now close your eyes and for the next 2 minutes concentrate on this feeling.

Appendix H

Dissociation Conditions. Please take a moment to remember a time when you were with (someone close, an acquaintance, alone) and you felt very separated from yourself, flooded with painful memories or when you came to after blanking out and things felt different.

When you have recalled a memory of a time when you felt very separated from yourself, flooded with painful memories or when you came to after blanking out and things felt different, focus on it so that you have a vivid impression of the events involved. Take a minute to experience the feelings that you felt at that time.

Once you have done this, please write down the memory in as much detail as you can. You will not show what you write to me.

Control Condition. Please take a moment to remember a time when you were with (someone close, an acquaintance, or alone) and you felt CALM and RELAXED. When choosing this memory, make sure it's one when you weren't also experiencing other emotions (e.g., joy, sadness, etc.). That is, don't pick a memory in which you felt calm and sad, or calm and joyful.

When you have recalled a memory of a time when you were CALM and RELAXED, focus on it so that you have a vivid impression of the events involved. Take a minute to experience the feelings that you felt at that time.

Once you have done this, please write down the memory in as much detail as you can. You will not show what you write to me.

Appendix I

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

HUMAN ETHICS COMMITTEE

Secretary, Rebecca Robinson
Telephone: +64 03 369 4588, Extn 94588
Email: human-ethics@canterbury.ac.nz

Ref: HEC 2016/119

20 December 2016

Abbie Schultz
Psychology
UNIVERSITY OF CANTERBURY

Dear Abbie

The Human Ethics Committee advises that your research proposal "Does Dissociation in the Presence of Others cause Shame?" has been considered and approved.

Please note that this approval is subject to the incorporation of the amendments you have provided in your email of 9th December 2016.

Best wishes for your project.

Yours sincerely

pp. R. Robinson

Associate Professor Jane Maidment
Chair
University of Canterbury Human Ethics Committee

Appendix J

Ngāi Tahu Consultation and Engagement Group

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

08/12/16

Tēnā koe, Abbie

Re: Does dissociation cause shame in an interpersonal context

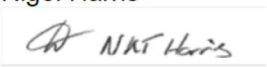
This letter is written on behalf of the Ngāi Tahu Consultation and Engagement Group. We have read and considered your proposal and acknowledge that this is a worthwhile and interesting project.

It is well considered and the researcher is clear about how they ought to take participants' (cultural) needs into account.

Thank you for engaging with the Māori consultation process. This will strengthen your research proposal, support the University's Strategy for Māori Development, and increase the likelihood of success with external engagement. It will also increase the likelihood that the outcomes of your research will be of benefit to Māori communities. We wish you all the best with your current project and look forward to hearing about future research plans.

The Ngāi Tahu Consultation and Engagement Group would appreciate a summary of your findings on completion of the current project. Please feel free to contact me if you have any questions.

Nga mihi
Nigel Harris



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Appendix K

College of Arts

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Email: abbie.schultz@pg.cantbury.ac.nz

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Information Form

Title: Emotions and Dissociation in relationships.

We are conducting a research study looking at the association between dissociation and emotions, with a special interest in how dissociation and emotions are related in different relationship settings. This research will help us further understand dissociative experiences.

This letter provides some information about the nature of the research. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. If you have any questions please ask me.

What is the purpose of the study?

Dissociation refers to different experiences that range from daydreams to losing track of time, to feeling disconnected from oneself. Studies have shown that dissociation is related to different emotional experiences including embarrassment, sadness, anxiety, shame and anger. This study examines whether dissociative experiences are associated with different emotions when they occurs in three different relationship contexts – when with a close friend, when with a stranger and when alone.

Understanding the relationship between dissociation and its related emotional experiences will help therapists understand the inner experiences of individuals who experience dissociative symptoms as an outcome of distressing experiences. A better understanding of the relationship between experiencing dissociation and feelings like shame will help inform the therapeutic healing process.

Do I have to take part?

No, it is up to you whether you decide to take part. If you do want to be involved, please read the consent form and sign it. If you decide not to take part this will be completely understood and your therapy will not be affected.

What will happen to me if I take part?

You will shortly be asked to complete four forms, which may take up to 20 minutes, these are questionnaires that look at things like your experience of dissociation, and how you are

currently feeling. Following this, you will be assigned to one of two groups. You will then be asked to reflect on times when you felt dissociation or times when you felt very peaceful. After this you will be read 20 statements off a computer screen, followed by a short paragraph and 2 minutes of concentrating on how the text has made you feel. These words and paragraphs will be related to feeling dissociation or feeling peaceful.

You will again have three short questionnaires to complete before watching a short video about nature.

Next, you will be asked to recall two more memories of times that you have either felt dissociative or calm and relaxed while with certain people (e.g., a friend or an acquaintance), and reflect on the feeling bought about by thinking of those times. You will then be asked to finally complete three short questionnaires about how you were feeling and thinking about those memories.

If you would like, I can work through the questionnaires with you, or you can complete them without assistance. At the end, you will receive a $10 petrol voucher to reimburse you for any travel, and a $15 Westfield voucher to reimburse you for your time.

Treatment of data.

Any information you provide us in this study will be kept confidential, meaning we cannot share your answers with anyone. Only the researchers whose names are included at the bottom will have access to your data. All information will be kept anonymous by ensuring your name is not on anything that contains information you provide in the study. All information will be put together with other people in the study. The results of the study may be published in a scientific journal, but no identifying information will be given. If you wish to obtain the overall results of this study, please contact Abbie Schultz via the email address provided at the end of this letter.

Your participation in this study is completely voluntary. You can withdraw from the study at any time without having to provide a reason. This decision will have no influence on your treatment.

Participation in this study will have no health risk however, it is possible that recalling dissociative memories may be felt as unpleasant. If at any time you feel distressed, you will be asked if you wish to continue. Remember, you are under no obligation to participate, or to continue to participate in the research if you do not wish to do so.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz)

Contact Details:

You are free to ask any further questions to Abbie Schultz at abbie.schultz@pg.canterbury.ac.nz, or her supervisor Prof Martin Dorahy (University of Canterbury) on 3643416 or martin.dorahy@canterbury.ac.nz. If you are interested in participating in this research, please complete the reply slip below and give it to your clinician at your next appointment, or contact Abbie or Martin.

Names of research team

Abbie Schultz (Masters of Arts (Psychology) student, University of Canterbury); Ken Clearwater (Manager; MSSAT); Prof Martin Dorahy (Clinical Psychologist; University of Canterbury); Dr Kumar Yogeeswaran (Senior Lecturer, University of Canterbury).

Appendix L

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UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Consent Form

'Dissociation and emotions in relationships'

I have read a full explanation of this project and understand what is involved in participation.

I understand that participation is voluntary and I may withdraw at any time prior to my data being merged with other data.

I understand that any information I provide is anonymous and that any published or reported results can not identify me.

I understand that all data collected for the study will be kept in password protected electronic form, and will be destroyed after 10 years.

I understand the risks associated with taking part and how they will be managed.

I understand that I am able to receive a report on the findings of the study by contacting Abbie Schultz at the conclusion of the project.

I understand that for further information I can contact Masters Student, Abbie Schultz abbie.schultz@pg.canterbury.ac.nz and/or Martin Dorahy: martin.dorahy@canterbury.ac.nz or phone: +64 3 3643 416.

If I have any complaints, I can contact the Chair of the University of Canterbury Human Ethics Committee, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

Names of research team

Abbie Schultz (Masters of Arts (Psychology) student, University of Canterbury); Ken Clearwater (Manager; MSSAT); Prof Martin Dorahy (Clinical Psychologist; University of Canterbury); Dr Kumar Yogeeswaran (Senior Lecturer, University of Canterbury).

Participant (Print Name): _____

Participant (Signed): _____

Date: _____

Would you like to receive a copy of the results (please tick)? Yes ☐ No ☐

Email address _____

Appendix M

1. Age:
2. Gender:
3. Which ethnic groups do you identify with?:
    - New Zealand European
    - Maori
    - Australian
    - Aboriginal
    - Samoan
    - Cook Island Maori
    - Tongan
    - Niuean
    - Chinese
    - Indian
    - Other such as Dutch, Japanese, Tokelauan. Please state:
4. What is your current (or highest) educational attainment? (EG University 100-Level classes)
5. Have you ever lost consciousness for more than half an hour as a result of a knock to the head?
6. What is your relationship status?
    - Single
    - In a relationship
    - Engaged
    - Married
    - Separated/Divorced

Appendix N

Rate the feelings that you noticed having while reading the 20 statements and during the task.

	NOT AT ALL (0)	A LITTLE (1)	SOMEW HAT (2)	A LOT (3)	EXTREMELY (4)
Angry					
Happy					
Ashamed					
Sad					
Disgusted in yourself					
Surprised					
Frightened					
Anxious					
Embarrassed					
Guilty					
Proud					
Relaxed/Calm					

Did you feel **embarrassed** or **ashamed** while reading the 20 questions and during the 2 minutes concentrating on the feelings you had because you experienced a sense of *(tick if applicable)*:

	YES	**NO**
Failure to control yourself?		
Feeling Exposed?		
Feeling flawed in some way?		
Feeling like you had lost control over yourself?		

Feeling somehow isolated or excluded from what is happening inside you?		
Feeling somehow isolated or excluded from what is happening around you?		
Feeling that others would feel ill or reject you if they knew what you were experiencing?		

Appendix O

Dear Participant,

Thank you for taking part in this study.

This study aimed to investigate if there is a causal link between symptoms of dissociation (e.g., feelings detached from oneself, forgetting things) and feelings of shame. We hope that by finding out if these two experiences have a strong link, therapists will have a better understanding of the kinds of symptoms and feelings that their clients/patients might have when they are working with individuals who have had traumatic experiences in their lives. To do this, the study asked you to recall times when you felt extremely detached from yourself, or you forgot things that had happened to you, or times when you felt calm and relaxed. You were then asked to either write those memories down or tell me about them. In the first part of the experiment, you were exposed to an induction procedure, during which you read a number of statements off the computer screen and spent two minutes thinking about the feelings that this bought up inside of you. You then filled out some questionnaires, which will help us understand the things that you were feeling after reading about the experiences in the statements and thinking about those feelings you had. In the next task, when you wrote down your memories, you filled out those questionnaires again, which will help us understand how thinking about feelings that people have had in the past can make people feel in the present.

If you feel distressed in any way following you participant today, please get in touch with someone you feel comfortable talking with this about, contact MSSAT or START, or alternatively you could contact:

Support Services:

Samaritans: 0800 726 666
Lifeline: 0800 543 354

Counselling Services:

Petersgate Counselling Service: (03) 343 3391

Emergency Services:

Crisis Resolution: (03) 364 0482 or 0800 920 092